



Edmonton's Urban Land Intensification Strategy

Edmonton's Intensification Audit



January 18, 2002





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Executive Summary

Introduction

Across North America, concern about the effects of urban growth is emerging. People are reacting to transportation, environmental and financial issues and linking them to patterns of urban growth. Governments at all levels are exploring new ways to manage urban growth strategically.

In adopting *Plan Edmonton*, City Council directed the Administration to prepare a "strategy for the intensification of land development". The creation of the strategy will provide Council and the community with an opportunity to examine how land and infrastructure is used in Edmonton and alternatives that may provide positive choices to sustain Edmonton's quality of life.

Phase One of the Edmonton Urban Land Intensification Strategy concludes with *Edmonton's Intensification Audit*. The audit found that Edmonton has a higher net residential density than most of the American and Canadian cities surveyed. Other intensification indicators measuring aspects of land use and transportation have Edmonton in the middle of the pack when compared to the surveyed cities.

As in other places, Edmonton and its region are facing the challenges of economic and population growth. The City has fallen behind in its ability to finance and provide infrastructure and services. Our citizens are concerned that Edmonton's growth will reduce the quality of life they enjoy, and there is a growing list of transportation and environmental concerns they want the City to address. As Edmonton grows, smart choices can be made to help us sustain the quality of life we enjoy.

The audit shows that intensification, especially residential intensification, is occurring throughout Edmonton, in the suburbs, in mature areas and in the downtown. Intensification is supported by both the development industry and environmental groups, although for different reasons.

The audit also shows that community representatives are not convinced that intensification is, in itself, a good objective and they are suspicious that an intensification initiative will undermine the quality of life in their communities. People responsible for infrastructure are also concerned that existing systems cannot meet the needs of more intense development.

Both developers and community representatives express concerns that the process for approving development proposals in established communities is reactive, adversarial, disruptive, costly and time consuming. With an extended period of strong growth for Edmonton being forecast, it may be that the principal challenge of the intensification strategy is to facilitate the natural inclination of the development industry to intensify land use in ways and in places that are acceptable to the residents of Edmonton.

Two key findings from the audit will help to direct the project as it moves into Phase Two. First is the finding from the focus groups that the project name creates negative impressions and limited understanding. The second finding from the focus groups is that drawing or crafting a physical vision for Edmonton would aid the community in making choices for our future.

In effect, the focus groups said that urban land use intensification is only one aspect of a larger community interest in making smart choices about the future of Edmonton's physical environment – both natural and man made. Audit research shows that making and implementing smart choices requires leadership, community will and resources.

The audit found that Edmonton has many strengths to build on, such as light rail transit, development opportunities on serviced land, modern infrastructure, existing community facilities and strong business and residential communities.

The City of Edmonton and its taxpayers have invested in original infrastructure, housing and businesses. *Plan Edmonton* provides policy directions that support maintenance and re-investment in these original elements to retain value in Edmonton and allow for continued quality of life. The audit identified areas that could benefit from renovation, re-investment and infill that would fulfill *Plan Edmonton's* policies. These actions can bring investment and vitality, support existing business, use existing infrastructure and support existing facilities, like schools or arenas.

Phase Two of this project will involve consultation with the community, with the objective of making smart choices about growth and re-investment that will meet Edmonton's unique needs. In Phase Two a physical vision will be developed to identify growth opportunity areas; determine acceptable forms of growth; and, refine community processes to accommodate growth.

When completed, Phase Two will provide recommendations to City Council on strategies, programs and funding for smart choice initiatives.

Principles

Council's economic, social and environmental vision statements will provide key direction to strategy development in Phase Two:

"Providing a physical and human infrastructure that contributes to economic development and quality of life." (City Council's Vision for Economic Prosperity)

"A city where individuals, families, organizations, communities, business and governments together build a working, caring, safe and clean community." (City Council's Vision for Social Well-Being and Quality of Life)

"Edmontonians sustain and enhance their environment for present and future citizens, in harmony with the global community." (City Council's Environmental Vision)

A discussion of our choices and intensification should address the financial challenges Edmonton and its citizens are facing. The City of Edmonton is dealing with increased construction, maintenance and service costs, increased operating expenses, a maintenance area that is growing steadily and a decline in provincial operating grants. Citizens are faced with tax increases to respond to Edmonton's increasing costs and shortfalls.



Preparation of a strategy will be based on the following principles:

- **maintaining or enhancing quality of life for Edmontonians through the provision of business and consumer choice and affordability, livable neighbourhoods and access to amenities;**
- **achieving municipal efficiencies to reduce corporate costs, by maximizing use of existing physical and human infrastructure or by maximizing the use of land; and**
- **increasing the mix of structures or activities on the land to maximize the use of land and increase citizen choice. An increase in the mix or number of structures or activities located on a given area of urban land will indicate successful intensification and re-investment.**

With intensification and re-investment, Edmonton's citizens may have more choices. Choices in the types and locations of housing available to them; in the distances they go to destinations; and in the transportation choices they make. Intensification and re-investment may also achieve

municipal efficiencies by making better use of land and existing physical and human infrastructure. Optimizing use is anticipated to reduce corporate costs and thereby reduce costs for citizens.

The Audit

The audit was conducted to provide a basis for future discussion on the option of intensification. The audit was designed to:

- identify Edmonton's current situation;
- compare Edmonton with other municipalities;
- receive community thoughts on the topic of intensification;
- examine *Plan Edmonton's* intensification policies;
- discover what other places have done to intensify; and,
- outline opportunities for and deterrents to intensification in Edmonton.

Findings from the Audit

Communities across North America have found that the cost of managing growing municipalities is far outstretching the property tax base that traditionally supports service demands. In Edmonton, there are similar concerns but Edmonton may already be moving towards intensification. Edmonton's residential areas are already relatively densely developed compared with other cities. In other respects, Edmonton's intensification indicators are in the middle of the pack compared with both Canadian and American cities and in some cases, Edmonton has a better ranking.

Edmontonians are willing to discuss efficiencies and growth, but are hesitant to use the term "intensification" as they feel it is too negative.

Edmonton's Current Situation and Trends

- Edmonton will continue to grow and intensification is occurring throughout the city. More residential, commercial, institutional, industrial and recreation development will occur. Public infrastructure will be required to support growth.
- Even with growth, Edmonton will lose some of its dominance in the region. Presently, more than 71% of the people in Edmonton's census metropolitan region (CMA) live in Edmonton, by 2025 only 68% of the CMA's population will live in Edmonton.
- Edmonton is experiencing financial strain as the City's growth adds pressure to add or expand services while revenues have declined due to inflation and the loss of provincial grants.

- Presently, 77.5% of Edmonton's labour force lives within Edmonton.
- The population in Edmonton's suburbs is growing as new residential development occurs.
- The number of households in Edmonton's older neighbourhoods is growing, but the population is declining. Over the past 20 years, Edmonton's mature neighbourhood population has fallen by nearly 75,000. Despite a population loss in the mature neighbourhoods, the number of households rose by nearly 1,800 over the past three years. The population in mature neighbourhoods is declining because the average household size has declined to 2.49 persons per unit.
- Edmonton may experience a demand for intensification, accessibility and smaller homes from its growing over 55 population and the growing "echo boom" group (born between 1977 and 1994).
- Edmonton has a balanced mix of multiple (47%) and single-family (53%) housing stock in comparison with other cities. The mix supports a healthy supply of housing types, sizes, options and price ranges while retaining a reasonably dense housing composition.
- 50% of the single-family houses built in the region are built in Edmonton, while 75% of the region's multi-family housing is built in Edmonton.
- Thirteen of Edmonton's neighbourhoods have residential densities of over 100 persons per net residential hectare. Of these, most are near the downtown or the university but also includes two mature neighbourhoods and two suburban neighbourhoods. Edmonton's two highest density neighbourhoods, Oliver and Garneau, are comparable in density to the inner city neighbourhoods of Stockholm, Brussels, Amsterdam, Hamburg, Zurich and London.
- Many of Edmonton's older neighbourhoods have experienced private re-investment in the form of renovations and new development, while the downtown has experienced both public and private re-investment. But other adjoining neighbourhoods are not receiving the same degree of re-investment.
- Edmontonians own 1.68 automobiles per household. Drivers' average trip time is 20 minutes per trip with an average trip length of 8.1 km., but some consumers may be willing to tradeoff a 50 minute drive to achieve the goal of purchasing a single family home. Although the number of vehicles is growing, emissions from automobiles are declining due to improved technology.

Comparing Edmonton with Other Places

- Intensification indicators were compared with 12 other municipalities - 6 across Canada, 3 in the U. S. and 3 in the region.

- Edmonton statistics show that land development is comparatively intense based on measurements of small single family lots, site coverage, the ratio of single family/multi-family housing, the number of multiple family building permits, and the transportation modal split.
- Edmonton is one of the more intense municipalities for the indicators of net density, the narrowest local road right of way, and average trip length.
- Edmonton has the most municipal parkland per 1000 population of all the cities surveyed.
- Edmonton has lower transit ridership than the other Canadian municipalities, but Edmonton's transit ridership is comparable to Portland's.
- Edmonton has lower car ownership than Atlanta, Denver, Portland, Vancouver and Calgary.
- Edmontonians drive fewer kilometres per capita than residents of Denver, Portland, Calgary and Vancouver.

Community Thoughts on Intensification

- Approximately 100 people attended 10 focused group discussions on intensification. Participants included citizens-at-large, members of business, development, community, and environmental organizations, government and institutional representatives and hard and soft service suppliers.
- The participants had mixed support for intensification.
- The participants had a negative reaction to the term "intensification". They felt it was a harsh phrase that would lead to negative impressions of the project's intentions. It was suggested that re-naming the project might lead to better initial understanding and avoid creating negative first impressions.
- The participants felt that the project should set out a long term vision for Edmonton; include clear goals and objectives; set out city policy; be based on an audit or assessment of the city's current situation; and include an action plan for implementation.

Plan Edmonton's Intensification Policies

- To determine *Plan Edmonton's* support and direction for intensification, an interdepartmental team assessed pertinent policies and strategies
- *Plan Edmonton* has 15 strategies that promote intensification of urban land use, but intensification is not a specific objective of the plan. Interpretations of how the *Plan* affects urban land use intensity differ.
- Concerns about the adequacy of the existing framework of *Plan Edmonton* are related to environmental conservation and the capacity of the City and other public organizations to provide infrastructure and services in a timely fashion. These areas could be addressed through programs developed under the umbrella of *Plan Edmonton*
- *Plan Edmonton* is now a three-year-old document. The audit raises the question "Have the needs and desires of Edmonton and its citizens changed sufficiently that a re-examination of the Plan's intensification policies is required or do the directions and intentions stated in the Plan still hold?"

A Snapshot of Urban Planning Approaches

- A literature and internet review of over 70 municipalities and programs indicates that communities across North America have found that the cost of managing growing municipalities is far outstretching the property tax base that traditionally supports service demands.
- Each community has designed unique responses to their growth problems. These responses may not transfer to a different community.
- The key elements required to address growth problems are:
 - ❑ a city's realization that being a better steward of its land and environment will cost less and offer a better quality of life for current and future generations;
 - ❑ leadership and a vision;
 - ❑ a program designed to fit the City and embraced by the community;
 - ❑ resources (innovative policy frameworks and financial commitments) to bring the vision to fruition; and
 - ❑ political and community will.

Opportunities for and Deterrents to Intensification in Edmonton

- A menu of intensification opportunities that may be feasible in Edmonton is provided to provoke discussion.

- Of the 62 suggested opportunities, 30 of them align with direction from *Plan Edmonton*. Of these 30 opportunities, ten are supported by an active municipal program.
- 32 of the suggested opportunities do not correspond with *Plan Edmonton* direction.
- Implementing the suggested opportunities will require community support and political will. Further discussion and refinement of these suggestions is essential.

Conclusion

The audit indicates that Edmonton has taken some steps towards intensification and re-investment and highlights the fact that intensification is part of a larger community interest. Making smart choices about growth and re-investment will address this community interest. Phase Two will allow Council and the community to engage in a discussion to develop a physical vision for Edmonton and programs designed to meet Edmonton's unique needs, enhanced by political and community will, embraced by the community and supported by policy and financial resources.



Edmonton's Urban Land Intensification Strategy

Audit Report One: Context and Trends



January 18, 2002

Edmonton

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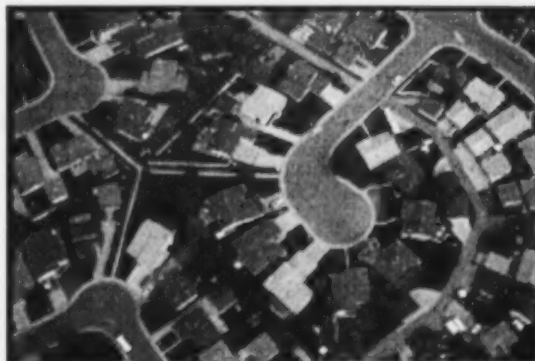
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Introduction

Audit Report One: Context and Trends presents a picture of Edmonton's current situation using key indicators of land use intensification. This report examines benchmarks and measures of progress. In addition to presenting the current context there are sections describing projected trends and the implications these trends may have for managing further growth. Graphs are used to track and project trends in Edmonton and the Census Metropolitan Area. Maps are used to identify areas of existing intensification and areas where the potential exists for further intensification.



Topics covered in this report include:

- A Catalogue of Intensification
- Demographics and Demand
- Land Use
- Economy and Investment
- Edmonton's Regional Context
- Transportation
- Environment
- Socio-Economic Situation

Intensification Catalogue

A catalogue of recent intensification in Edmonton is presented to give readers an understanding of the range of activities that result in intensification.

Downtown



Canterra Centre, Jasper Avenue and 109 Street. 16 unit commercial redevelopment of a former rail terminal.



Former CP Rail yard at 111 Street and 102 Avenue. Residential and park redevelopment, 501 new residential units



Phillips Lofts, 104 Avenue. 39 unit residential conversion.

Inner City Neighbourhoods



Infrastructure renewal in an inner city neighbourhood.



The Ashby, 150 unit residential and park redevelopment of a former rail yard at 104 Avenue and 117 Street on the Queen Mary Park/Oliver neighbourhood Boundary. A second phase of 150 units underway.

Mature Neighbourhoods



Urban Fare, 142 Street and 96 Avenue. Intensification through infill commercial redevelopment, outcome: more businesses on site.



Glenora Properties, 125 Street and Clifton Place. 69 unit infill development in a mature neighbourhood. Experienced considerable community opposition.

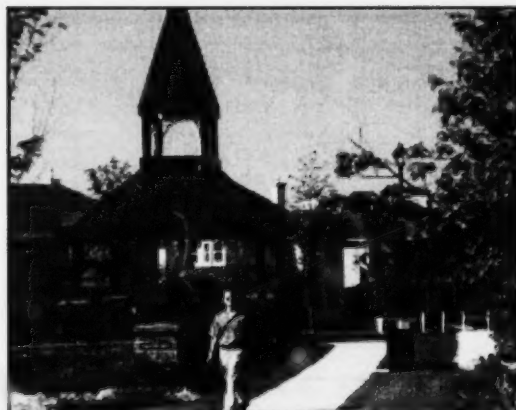


Creekside on Mill Creek ravine at 80 Avenue and 96 Street. 174 unit residential redevelopment of a former industrial site. Experienced considerable community resistance.

New Suburbs



Garage suites in Terwillegar Towne. Increased housing options and density in new neighbourhoods.



Terwillegar Towne square. Town centre, walkable community.



Multiple family housing in Terwillegar Towne, may result in higher density development.

Institutions



**St Joseph Catholic Senior Secondary
School 10830 - 109 Street.
Increased learning space.**



**Telus Centre for Professional
Development, 87 Avenue and 111
Street. Infill development on a
former parking lot and minor building
site.**



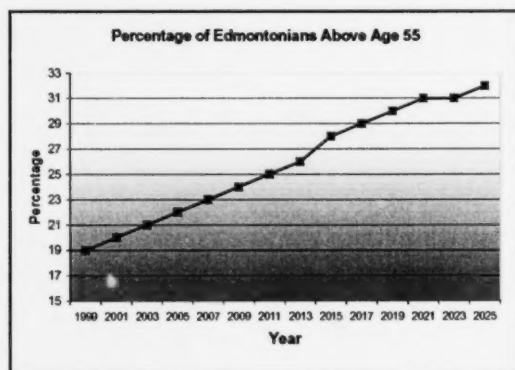
**Grant MacEwan Community College,
Downtown Campus.
Redevelopment of a former rail
yard.**

Demographics and Demand

Aging Trend

As baby boomers and teenagers age they may seek more compact housing options within easy reach of amenities.

Edmonton's population is aging and this could have considerable impact upon the housing needs of Edmontonians. The current percentage of Edmontonians above age 55 is approximately 20 percent, however by the year 2023 this figure is expected to approach 31 percent, see chart below ¹.



The baby boomers may be ready for smaller, more easily maintained housing close to communities with shorter commuting times and many services within walking distance.

Many of the echo boomer young adults, born between 1980 and 1995,² will seek out housing in the central areas of larger cities rather than in the suburbs. For the Edmonton Census Metropolitan Area (CMA), the number of young adults aged 20 to 29 is forecast to increase by nearly 12,000 over the next five years.³

A study by Canada Mortgage and Housing Corporation (CMHC) indicates a growing demand for housing in the central areas of Canada's largest cities.⁴ The CMHC study found that potential buyers in these cities considered a neighbourhood rather than a particular house to be the most important factor when choosing a home. Six of the nine cities in the study, including Toronto and Montreal, saw increases in the percentage of housing starts in the central area. Edmonton's central area experienced an increase in its share of housing starts. Housing built in the central area of the City increased from 9% of all housing starts in Edmonton to 13% between 1994 and 1998.

The aging trend means that a segment of the population may sell their single-family homes and buy condominiums and other housing options that reduce the amount of upkeep required and that place residents a short distance from the shops and services they desire. The number of people who will age in place and therefore not contribute to intensification is not known. However, it may be harder for people to age in place in suburban locations isolated from shops and services as opposed to those individuals who age in place in more mature or mixed, walkable and more fully serviced neighbourhoods.

With an increase in citizens of retirement age there is a foreseeable demand for housing that is closer to all kinds of services, from physicians to grocery stores to community centres. Driving long distances to reach these services and amenities becomes an increasingly difficult task that many older people will want to avoid. As such increased housing options in existing developed areas and infill projects may become favourable alternatives to suburban dwellings.

Demographic Change

Household size is declining as grown children move out and the diversity of family forms increases. This creates a growing market for smaller living spaces.

Average household size has declined to 2.49 persons per dwelling.⁵ This means that there are fewer people living in each household than in previous decades and this trend is expected to continue due to an aging population, single parent families, single child families, single person households and other types of family arrangements. Household growth rates have been shaped by the baby boom generation maturing into adulthood as well as social factors such as comparatively higher divorce rates and changed family forms.

Over the next five years the number of households in the Edmonton CMA is expected to increase by about 36,000, however the number of people in these households will be lower than in previous decades.⁶

The decline in the number of young people in our population will begin to have an effect on schools and other agencies providing services to children.

During the next five years the 75+ age cohort in Edmonton is expected to increase 20% by 2006.⁷ The increase will largely occur in the older, central areas of the City and a high proportion of this age group will be women living alone. The demand for services such as health care, exercise programs, seniors housing and aids to daily living will continue to increase. Isolation may be a problem for some of the elderly. An increased need for home care combined with isolation could give rise to a market

niche for secondary suites to help provide the widowed added income, yard upkeep, and provide a social fabric for this aging demographic.

The Baby Boomers 35 – 54 age group in Edmonton is expected to increase 6% and the 55 – 64 age group is expected to increase 30% by 2006.⁸ These changes will put pressure on the health care system, including more frequent trips to health care providers, and growth in the medical services industry.

The Canadian Mortgage and Housing Corporation (CMHC) projects 24% population growth in Alberta over the next 20 years. With the empty nesters becoming a larger segment of the housing market, CMHC projects a doubling in older adult (55-75 yrs) housing demand in Alberta.⁹ This will create a larger market for smaller homes, condos, and homes with fewer stairs and assisted living options.

Household Composition

The populations of suburban neighbourhoods continue to grow. Populations in mature neighbourhoods are falling. At the same time the number of households in mature neighbourhoods rose marginally.

Edmonton's population has grown 1.1% per year between the 1993 census population of 626,999 and the 1999 population of 648,284.¹⁰

The population of Edmonton's suburban neighbourhoods (built after 1969) increased by nearly 30,000 people between 1993 and 1999, while the number of people living in mature neighbourhoods (see map 15, Mature Neighbourhoods) declined by 8,000 in the same period. Despite the population

loss in the mature neighbourhoods the number of households rose by nearly 1,800 in this area, due to lower average household size of 2.49 persons per unit.¹¹

Individual neighbourhoods throughout Edmonton lost population between 1993 and 1999. This can be attributed to adult children leaving the home.

Nearly half of Edmonton residents lived at their address for five or more years, 13% for three to four years, 23% for one to two years and 15% for less than one year.¹² The mature neighbourhoods and the suburbs have very similar percentages for length of residence. The traffic district with the highest percentage of long term residents is Capilano and the Downtown featured the least stationary residents.

Of all households, 57% are owned and the remaining 43% are rented. The most popular form of housing in Edmonton is the single family home accounting for 51% of all households. The next most popular form of dwelling is the under five-story apartment at 22% of all households.¹³

Neighbourhood Population Change

Demographic forecasting shows that most residential areas in Edmonton will grow. Two areas are projected to decline slightly, Mill Woods and Kaskitayo and the adjacent mature area south of Whitemud Drive. The most extensive population growth will occur in new suburban areas on the north, west and south flanks of the City.

Current populations in Edmonton's neighbourhoods are shown on Map 11, Population by Standard Neighbourhood.

Population projections by the Planning and Development Department and the

Transportation and Streets Department for 2000 to 2025 are shown on Map 1, Projected Population Change by Traffic District.

The Downtown, areas surrounding the Downtown, University, Strathcona and areas north of the Yellowhead and west of 97 Street will experience redevelopment growth rates of approximately 2 percent.

The Mature Neighbourhoods (built prior to 1969, see map 15) excluding those south of Whitemud Drive and the areas will sustain stable growth with possible temporary, minimal declines in population.

The areas of the City that will experience the most explosive growth are those areas that are under active development. These include areas bounding the City limits to the north, west and south. These areas represent brand new development serving to expand the housing stock for the City's growing population. Currently, single family housing dominates these markets.

There are two areas that are expected to experience declines in population. These areas are Mill Woods west of 34 Street, Kaskitayo, and the mature neighbourhoods south of Whitemud Drive. Reasons for this decline include the moving away of the now adult children of the "first wave" families in Mill Woods and Kaskitayo. This is a normal trend in the lifecycles of suburban neighbourhoods. The challenge will be to attract buyers for properties that become available in these neighbourhoods as families adjust to their new size by moving to other locations and types of housing.

Neighbourhood Cycle

As the first residents of a neighbourhood age, adult children move away, and the parents may seek out another place of residence. This population reduction is usually slowed or reversed as the lone adults move out and sell properties to younger families.

As mentioned above there are two groups of neighbourhoods with populations expected to decline. This can be explained by looking at a conceptual model of neighbourhood cycles. (Diagram 1, Conceptual Neighbourhood Cycle.¹⁴) As a neighbourhood develops it typically fills up with a first wave of younger families or couples preparing to have families. As people in these families age the children of the parents will move away, lowering the population and average household size of the neighbourhood. The trend continues as parents move away to smaller or different housing that is better suited to the needs of their smaller family. However the decline is typically not permanent given good social and economic conditions. Under good conditions a new wave of families will begin to move in to fill the opportunities created by the passing of the first wave of families. Thus the neighbourhood achieves a more mixed demographic and moves towards a "stable growth" scenario as families and individuals move to and from the neighbourhood according to their needs.

Land Use

Edmonton's Growth over Time

In 100 years the City of Edmonton has grown from a town of 9 square kilometers to a city of 700.6 square kilometers.

The City of Edmonton has a history of growth that includes not only population growth, but spatial growth as well. The City has grown from a town of 9 square kilometers in 1892 to a City of 700 square kilometers in 1982. The City expanded its geography through a series of annexations over the last century. The single largest annexation occurred in 1982 with the absorption of 91,300 acres of land.¹⁵ Until 1982 the patterns of annexation were basically concentric, expanding along the periphery of the built out areas. The 1982 annexation resulted in Edmonton receiving a larger land area than the City had originally requested. Annexations are shown on Map 2, History of Annexations Map. The seemingly vast amounts of available space suggest that there is room left to grow, however the type and direction of growth should be considered in the context of Edmonton's finances, the availability of infrastructure and the current use of the land for agriculture.

Mature Neighbourhood and Suburban Population Growth

Mature neighbourhoods are losing population. Encouraging infill development and increased densities may bring life back to these neighbourhoods.

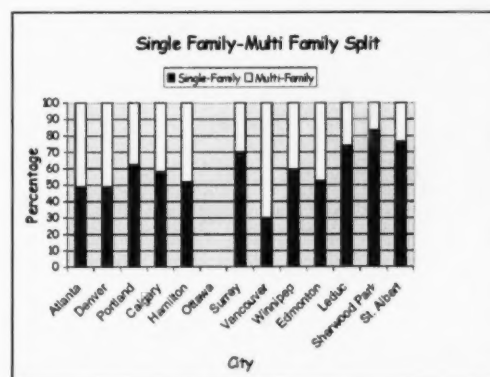
In the past 20 years, Edmonton's mature neighbourhood population has fallen by nearly 75,000 (56,000 between 1986 and 1996). The challenge is to reverse this population loss, helped in part by priorities

established in Plan Edmonton for investment in mature neighbourhoods. The City's population is expected to increase by about 111,000 by 2010 with about 11,000 new residents in the mature neighbourhoods and 100,000 new residents locating in the suburban communities.¹⁶

Single Family vs. Multifamily Trends in Edmonton

Edmonton has a well balanced mix of multiple and single family housing stock that provides housing choices for a range of family sizes and incomes.

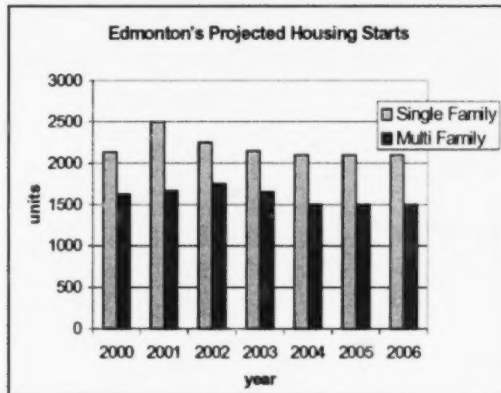
The single family versus multiple family split in Edmonton is a measure of the ratio of single family housing to multiple family housing available to consumers.



By looking at the Single Family – Multi Family Split chart above, showing how Edmonton stacks up in terms of the ratio of multi unit dwellings compared to other cities in North America, it is clear that Edmonton is situated in the middle of the pack.¹⁷ This means that Edmonton has a well balanced mix of multiple and single family housing stock. Edmonton is neither too far behind in terms of providing higher density housing options, nor is it too heavily dominated by single family housing options.

Edmonton's equitable split between the two kinds of housing options ensures that there is choice in the marketplace for consumers and that a range of housing options exist for a range of family sizes and incomes.

Housing start projections to 2006 suggest a stable market with 2,200 to 2,100 single housing starts annually.¹⁸ The multi family housing market also is projected to remain stable despite a small decline in the number of units built annually. The multifamily market is expected to see production of 1,750 units in 2002 declining to 1500 units annually by 2004 through to 2006. (See Projected housing starts graph below)



The ratio of single family housing starts to multi family housing starts is projected to be stable with 60 percent of all new starts being single family and 40 percent of all starts being multi family. This is a good ratio as it ensures a healthy supply of housing types, sizes, options and price ranges while retaining a reasonably dense housing composition.

Single Family vs. Multi Family Dwellings By Neighbourhood

Single family housing dominates in several mature and suburban neighbourhoods.

Map 3, Single Detached Housing as a Percentage of Total Dwelling Units by Neighbourhood shows the percentage of single family housing by neighbourhood. This map identifies neighbourhoods that have limited options for aging in place and the neighbourhoods that offer the greatest variety of housing options. Maps 3, 4 and 10 show that residential neighbourhoods with low amounts of single family dwellings have higher amounts of multiple family dwellings and higher residential densities. According to Map 3 the highest percentage of multi family dwellings are centered around the Downtown, U of A, Abbottsfield, 170 Street, Calgary Trail and in Mill Woods.

Residential Density

The density of residential areas in Edmonton varies from a low of less than 50 persons per hectare to a high of 150 persons per hectare (net). Higher densities are a key component to increasing land use intensity and there are several areas of the City that are already succeeding in this respect.

Residential densities in Edmonton vary from 50 to 150 persons per net residential hectare.¹⁹ (Persons per net residential hectare measures the number of people on lands zoned for residential dwelling and excludes lands zoned industrial, commercial, agricultural or park.)

On the high end of the scale there are eight neighbourhoods registering totals of more than 125 persons per net residential hectare. These neighbourhoods are Mill

Woods Town Centre, Abbotsfield, Empire Park, Garneau, Central McDougall, Boyle Street, Downtown and Oliver. There are five neighbourhoods with "Medium High" densities between 100 and 125 persons per net residential hectare, including Callingwood South, Queen Mary Park, McCauley, Cromdale and Strathcona. There are several areas of medium density, usually located near areas of high density. The remainder of the City is developed to "Low Medium" or "Low" density. For a detailed look at residential densities please refer to Map 4, Mean Residential Density by Standard Neighbourhood.

Both old historic neighbourhoods and new ones range in density. Historic neighbourhoods like Strathcona, Garneau and McCauley house large populations, as do newer neighbourhoods such as Abbotsfield and Mill Woods Town Centre. The opposite is also true, low-density neighbourhoods exist in some of the oldest parts of the City such as Glenora and in the newest reaches of the city as in Potter Greens.

Edmonton's two highest density neighbourhoods, Oliver and Garneau, having 92 and 81 people per gross hectare respectively, are comparable in density to the inner city neighbourhoods of Stockholm, Brussels, Amsterdam, Hamburg, Zurich and London²⁰.

Edmonton's average population density is 30 pph, close to that of Copenhagen's 28.6 pph. Most of Edmonton's neighbourhoods have densities similar to neighbourhoods in comparable Canadian cities, and suburban neighbourhoods in London, Paris, Copenhagen and Amsterdam. Edmonton, like most Canadian cities, has a denser development pattern than American cities of similar size.

Location of Residential Intensification

Residential intensification is happening in Edmonton.

In this Audit, projects considered to be intensification are those which bring an increased level of activity to a parcel of land. The most common form of residential intensification in Edmonton is multiple unit residential development. This can be anything from the transition of a vacant site or single family development to a duplex, town house or a multi tower high-rise complex.

The Audit tracked and mapped residential intensification projects in Edmonton over the 1997 to 2000 period. These projects are shown on Map 12, Residential Intensification Projects 1997 – 2000. The general trend shows the bulk of the residential intensification projects have occurred in central areas of the city, including the Downtown, University of Alberta, and Bonnie Doon. Other areas attracting multiple unit residential developments are in the West End, Clareview, Mill Woods and Riverbend with significant concentrations found in the Terra Rosa, Ozerna and Kensington neighbourhoods.

Potential Dwelling Unit Density by Zoning

Mid-low density neighbourhoods comprise the bulk of residential zoning in the City.

Map 9, Potential Dwelling Unit Density by Zoning shows that if residential lands were developed to approved capacity, dwelling unit densities would be highest in the areas surrounding the central business district and extending north-east along the LRT line. Other areas with high potential dwelling unit densities are found along arterial roadways and are typically located in high activity commercial and social centres such as the Whyte Avenue/University area, Mill Woods Town Centre, Abbotsfield, and Northgate. The lowest potential residential densities are found in the mobile home parks and rural-agricultural areas of the city. Between these two extremes we find mid-low density neighbourhoods comprise the bulk of the residential zoning in the City. Edmonton's newer areas offer more potential for mid to low unit densities. The mature, built out areas that circle the Downtown and University/Whyte Avenue areas are primarily dominated by low unit densities.

Comparing Map 9 with Map 10, Mean Dwelling Unit Density by Standard Neighbourhood, it is apparent that the number of potential dwelling units per hectare generally corresponds to the existing dwelling unit density in a neighbourhood. Although in some cases the actual dwelling unit density is lower than the potential dwelling unit density would indicate.

Neighbourhood Forecasts

The planned populations of proposed neighbourhoods may not always be achieved.

In the past there have been differences between the expected build out populations for planned communities and the actual buildouts achieved. For example in Castledowns the outline plan population was estimated to be 41,000 persons. The actual population is only 29,840, a difference of 11,200 persons.²¹ This means that communities may have been planned for higher population densities than achieved and that expenditures per person for services could be higher than anticipated. Situations like the Castledowns example can come about due to the dynamic nature of demographic and market trends. Market conditions could stall developments and change the ratio of single family and multifamily units built, and changes in demographics such as the number of persons per dwelling unit can throw population estimates off actual figures. Providing population estimates for communities, which may take fifteen years to achieve completion, allows plenty of time for changes in the economy, demographic or market trends to affect total populations.

Protection of Agricultural Land

The loss of agricultural land has been slowed by policies for the preservation of agricultural land and contiguous development.

From 1997 to 2000²², Plan Edmonton's policies for preserving agricultural land were largely adhered to and:

- No major plans or plan amendments were applied for or approved.
- No redistricting applications for non-agricultural uses were approved.
- 113.6 hectares were subdivided out of the 10,200 hectares of agricultural area.

Economy and Investment

Economic Forecast - Canada

Minimal economic growth is projected at the national level before 2003 as the Canadian and American economies recover from a recession.

The Canadian economy has followed the U.S. into a recession, which is likely to last until the end of 2001 and into 2002. The substantial monetary and fiscal stimulus already in the pipeline, coupled with a rebound in the U.S. economy later in 2002, is expected to aid the economy on its way to recovery. The Canadian economy is forecast to grow by 1.4% in 2001 and 1.7% in 2002. Economic growth will intensify over the 2003-06 period.²³

Economic Forecast - Alberta

Growth in the Alberta economy will slow in 2002 before returning to stronger growth levels in 2003-06.

After a stellar performance in 2000, thanks to the energy sector, the Alberta economy is expected to continue to grow, albeit at a more moderate pace. Lower taxes and interest rates, positive net migration, supported by continuing consumer, government and business spending will result in a 4.5% expansion in 2001, followed by an additional 2.8% in 2002. The economic growth is forecast to average 3.5%-3.7% over the 2003-06 period.²⁴

Economic Forecast - Edmonton

Edmonton can expect strong economic growth of 3.5% after 2002 as the North American and world economies return to their long-term upward trend.

Buoyed by sharply higher energy prices, a strong provincial economy and positive net migration, the Edmonton region's economy is estimated to have grown by 4.5% in 2000.

Economic prosperity is expected to continue in the region in 2001 and 2002. Tax cuts, lower interest rates and continuing healthy energy investment in northern Alberta, will result in the Edmonton region's economy growing by 4.6% in 2001. Lower commodity prices due to sluggish North American and world economies, coupled with the completion of several major projects currently underway, will slow the Edmonton region's economic growth to 2.8% in 2002. With the North American and world economies returning to their respective long-term growth paths by 2003, the Edmonton regional economy will expand at about 3.5% per year over 2003-06.²⁵

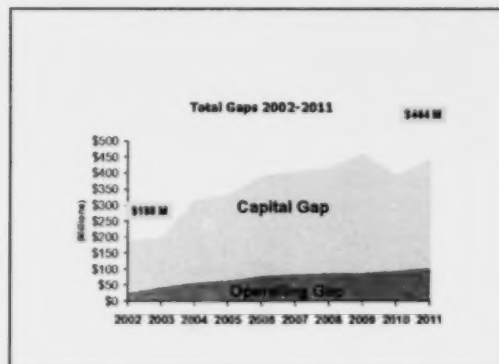
Financial Strain

Several factors have placed extensive demands on Edmonton's tax revenue.

Demands on Edmonton's tax revenue have been increasing. Historically, major factors have included inflation in the cost of delivering civic services, the Downtown property re-assessment and the loss of provincial grant funding. More recently, as the city has experienced substantial growth there has also been increased pressure to add new services or expand existing services.

Over the 1993 to 2000 period, operating grants to the City declined by \$39 million. Of this amount, \$35 million were grant reductions imposed by the Province in the mid-1990's. Edmonton currently has initiatives underway aimed at seeking a more equitable revenue sharing arrangement with the Province.

The chart below – as contained in the City of Edmonton 2002-04 Corporate Business Plan²⁶ – shows the total operating and capital gaps expected over the 2002-2011 period. As indicated in the chart below, the total gap grows from \$186 million in 2002 to \$444 million by 2011, even with tax rates rising at the same rate as the Consumer Price Index. The operating gap increases from \$27 million in 2002 to \$103 million in 2011, while the capital gap grows from \$160 million to \$341 million.

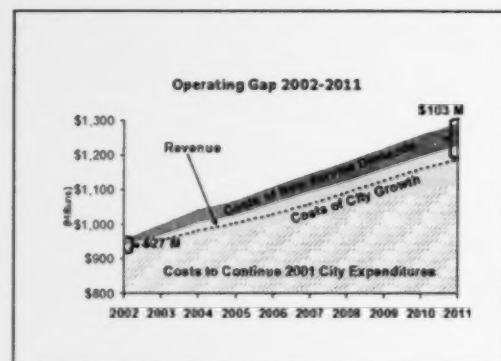


The operating gap shown in the chart below, (next column) is the difference between projected revenues and total costs. Costs are broken down into two components:

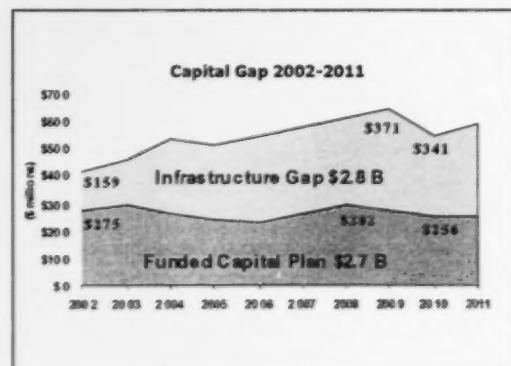
- **Cost Impacts:** The projected cost of continuing to deliver the same service provided in 2001, adjusted for inflation and,

- **Service Needs:** The cost of adding new services or expanding current services beyond 2001 levels to meet growth demands of the City and emerging needs.

It is important to note that the operating gap is expected to consist entirely of service needs. Existing costs, when adjusted for inflation, can be accommodated within the projected revenue streams. This positive result is due to recent strong growth in EPCOR dividends, robust assessment growth and the implementation of operating efficiencies.

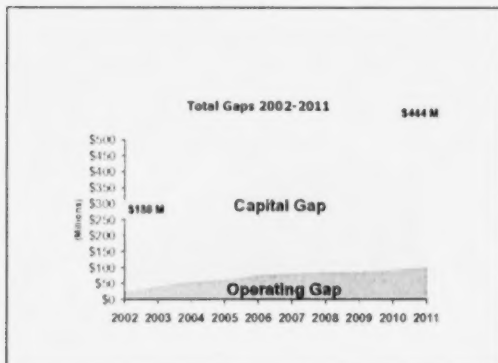


The graph below depicts the direction of future capital requirements for the City of Edmonton.



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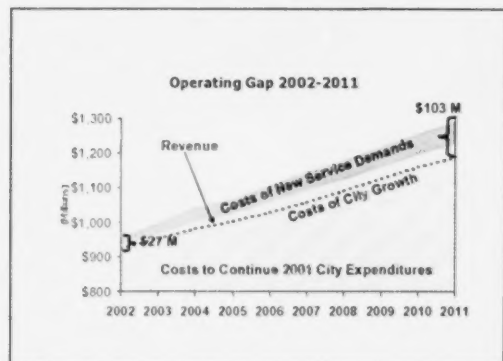


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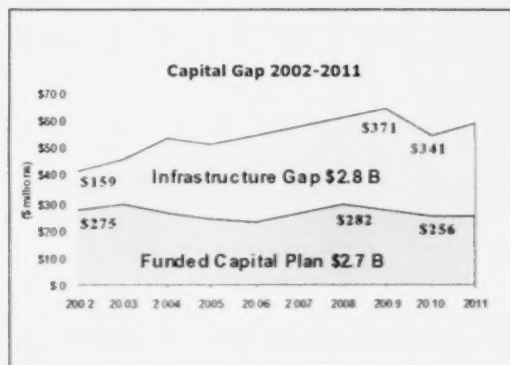
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The graph below depicts the direction of future capital requirements for the City of Edmonton.



Over the 10-year period, the capital plan totals \$5.5 billion of which \$2.7 billion is funded and \$2.8 billion is unfunded (also referred to as the "Infrastructure Gap").

City Council has initiated the Closing the Gap program as a strategy for dealing with the funding gaps. This program is both a continuation and an expansion of previous efforts to improve the financial health of the City. The program will:

- Ensure that the City of Edmonton has the fiscal capacity to meet its responsibilities.
- Improve the City's financial sustainability over the long term.
- Improve the delivery of services.
- Increase efficiency.
- Clarify accountability.
- Ensure that the Province consults with the City prior to making decisions that impact the City.

The City is also continuing work on the Infrastructure Strategy to specifically deal with capital issues.

Building Permit Trends

Edmontonians are investing in older neighbourhoods, through renovation and new development, but some older neighbourhoods are not experiencing this trend.

Investment in renovations signals confidence, encourages neighbourhood renewal and retains housing values. Since 1997, many of Edmonton's older neighbourhoods have been experiencing renovation activity. Sixty-two of Edmonton's 113 older neighbourhoods have experienced "approved" private renovation investment ranging from \$250,000 to over \$750,000. This includes the downtown, which has experienced both public and private re-investment. Map 13, Residential Renovation Permits by Standard Neighbourhoods, shows that the strongest re-investment is in the centre of Edmonton. At the same time, adjacent neighbourhoods are not experiencing the same degree of private re-investment.

New development indicates financial commitment and expectations for a strong and stable future in a neighbourhood. Map 14, New Residential Permits by Standard Neighbourhoods, shows the majority of new development is occurring in Edmonton's new neighbourhoods. But it also shows that citizens and developers are re-investing in many of Edmonton's older neighbourhoods with the number of new developments in these neighbourhoods ranging from just a few to over 200. Again, some adjacent older neighbourhoods are not experiencing the same degree of re-investment commitment.

Edmonton's Regional Context

Edmonton Census Metropolitan Area

The Edmonton Census Metropolitan Area will be home to over a million people by 2006

The Edmonton Census Metropolitan Area (CMA) is an area of approximately 9,800 square kilometers, encompassing 21 communities with a 1996 population of 860,000 residents. To view all the communities encompassed by the CMA refer to Map 5, Edmonton Census Metropolitan Area. The Edmonton CMA is the sixth largest in Canada behind Calgary and Ottawa-Hull.²⁷ Statistics Canada predicts that by 2006 the City of Edmonton will have a population of over 700,000 while the CMA will have a population of just over one million. By the year 2025 the City is projected to become home to 827,000 people while the CMA expands to 1.2 million residents.²⁸

Housing Starts

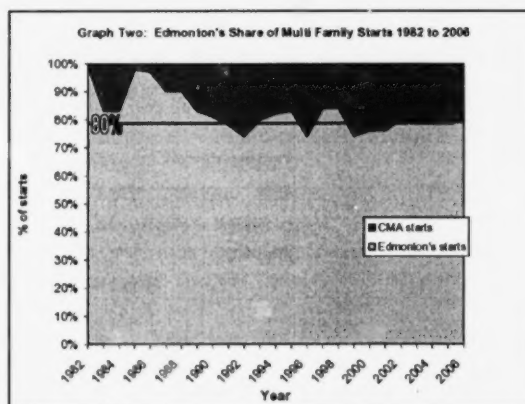
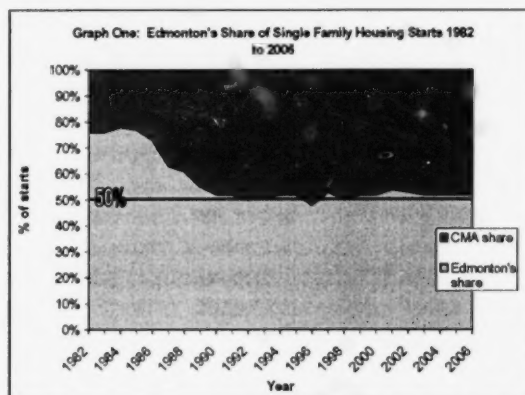
Edmonton's share of Census Metropolitan Area's housing starts has been falling. This would suggest that the population base is spreading outwards from the city, placing greater strains on infrastructure.

The share of housing starts within the City of Edmonton has been falling in relation to the housing starts occurring in the communities surrounding the City.

As shown on Graph One, Edmonton's share of single family housing starts has been falling since 1985 as more housing is being built outside the City.

A downward trend in Edmonton's share of multiple family housing is evident over the last ten years. Edmonton has been losing

its share to other cities and towns in the CMA. At its peak Edmonton held 98 percent of multiple housing starts in 1982, and 1985-84. Since that time Edmonton's share of the multiple housing starts has fallen to the current level of 75 percent as shown on Graph Two.²⁹



Residential Property Taxes

Edmonton's residential property taxes are well below the Canadian average.

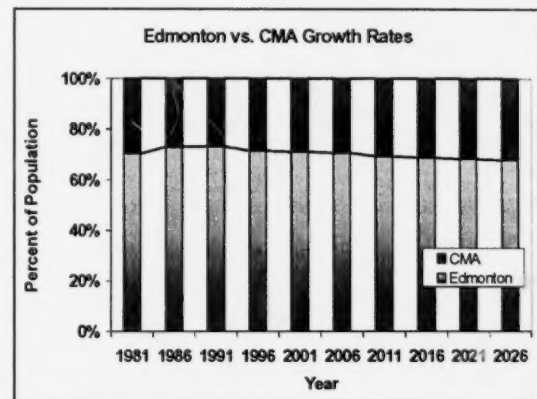
When compared to other municipalities Edmonton represents good value for residential taxes paid. Edmonton's total property taxes for the average single family house was 20 percent lower than the Canadian average and ranked the fifth lowest among the cities. Edmonton's tax was slightly lower than the Region's average and ranked the seventh lowest in the Region. Edmonton's total property tax was 2.3 percent lower than Calgary's tax.³⁰

Edmonton vs. Regional Growth Rates

Edmonton's share of regional growth will decline by 4 percent by 2025.

Edmonton's share of the regional growth rate is an important indicator of population and investment trends in the City. According to projections, Edmonton will retain a growth rate around 1.5% over the next five years.

More than 71 percent of people in the Edmonton CMA live in the City of Edmonton.³¹ City of Edmonton projections indicate 68 percent of the population of the Edmonton CMA will be living in the City of Edmonton by 2025. The City will experience a growth rate of approximately 1.5 percent each year over the next quarter century. The chart opposite tracks the growth rates of Edmonton contrasted with that of the CMA.³²



Transportation

Transportation Destinations

The core of the City will no longer account for most commuter trips, destinations will be peripheral and more dispersed.

In Edmonton most automobile trips originate from suburbs around the edges of the City and end in the inner sections of the City.

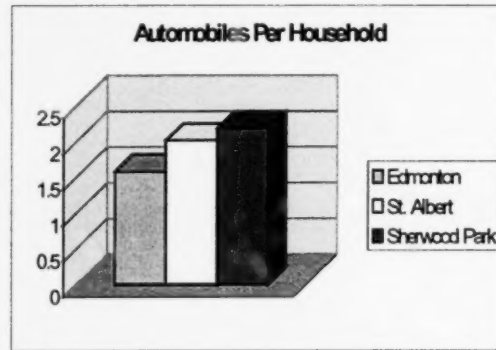
According to the Transportation Master Plan (see Map 6, Major Trip Patterns Map) this trend is expected to shift to a different pattern by 2020. It is expected that the majority of trips will originate in the City's newer suburbs, and that the trips will be to destinations in other peripheral suburbs. This means that the core of the City will no longer be the single most common destination of commuters, the destinations will be more dispersed and decentralized. Major future destinations are indicated on Map 7, Potential Intensification Nodes Map. Connectivity of major destinations will become a challenge in the City as trip generation shifts from the core of the city, to other activity centres.

Automobiles

The number of automobiles per capita is lower in Edmonton than in its neighbouring municipalities.

The number of personal automobiles in use in Edmonton is increasing. In 1994 there were 386,879 personal automobiles in Edmonton, and by 2000 this number had reached 437,904.³³ This corresponds with an increase in the number of automobiles per household. In 1994 there were 1.58 automobiles per household in Edmonton. By 2000 that number had increased to 1.68

automobiles per household in Edmonton. Edmonton residents own fewer automobiles than their regional counterparts³⁴. (See graph below)



Going the Distance

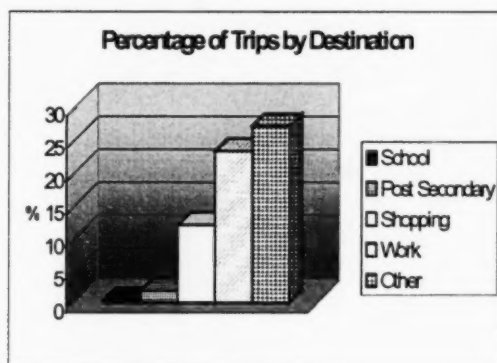
Travel times in Edmonton average 20 minutes per trip.

The total distance traveled by drivers who live in the City of Edmonton on an average weekday is estimated to be 9.9 million kilometers. The average trip length for drivers is 8.1 km, with the work trip being the longest commute at an average of 11.3 km and the shortest trip being the shopping trip at an average of 4.8 km. However with the current trend to de-centralization of retail, the length of the shopping commute may lengthen.

The average travel time for drivers in Edmonton is 20 minutes. The work trip average is 24 minutes in duration while the shopping trip averages 15 minutes in duration.³⁵

The greatest numbers of automobile trips in Edmonton are made up of trips that are difficult to classify. Such trips include going to the recreation centre to get the kids, trips to drop off a movie rental, trips to

clean the car, or pick up someone from the airport. These trips make up 27 percent of trips. Work trips are the second most frequent, weighing in at 23 percent of all trips. Shopping trips account for 12 percent of trips made. Trips to post secondary schools account for 2 percent of trips made and trips to school account for less than 1 percent of trips made, see chart below³⁶.

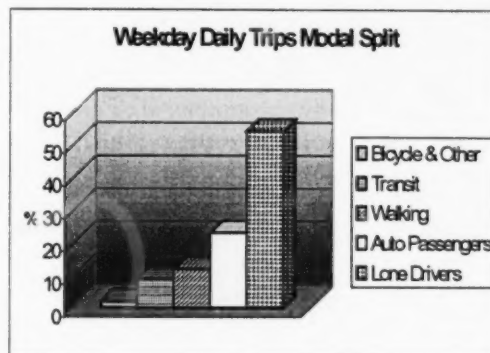


Multi-modal Transportation

Commuters may choose to leave the car at home, if convenient, safe travel options are available.

Automobiles are the dominant form of transportation in Edmonton. But transportation is an issue that affects everyone from automobile users, to cyclists, transit riders, airport users and pedestrians.

On the average weekday, the majority of trips in Edmonton are made by automobile. However, during rush hours public transit and other modes of transport play a more significant role in getting people to work and post secondary education. The chart³⁷ below shows the weekday daily person trips by travel mode.



Transit Routes and Centres

The 5 busiest transit centres each handle 22,000 to 28,000 arrivals and departures daily, and the Economic Activity Centres match up with existing transit system strengths.

Edmonton's busiest transit routes and transit centres are shown on Map 8, Major Transit Routes. These are the highest volume routes, with 1000 to 5000 person trips per day. The 5 busiest transit centres each handle 22,000 to 28,000 arrivals and departures per day, with the remaining transit centres handling between 15,000 and 2,200 arrivals and departures daily³⁸.

The economic activity centres identified in Map 7, Potential Intensification Nodes, match up with the existing strengths in transit service patterns. This means considerable infrastructure investment exists in these areas that can be further built upon through intensification in these areas.

Transportation Choices

In 1996, Edmontonians were willing to tradeoff 50 minutes of driving for the option of living in a single family home.

In 1996 a 1,280 household travel survey, entitled *Core Values Tradeoff Study*³⁹, was conducted in Edmonton as background for the Transportation Master Plan. A major finding of the study was that when given the choice between living in a suburban single family home and enduring longer travel times, higher taxes and larger environmental problems, the typical Edmonton household was willing to significantly increase the commuting distance between home and work. Specifically, the study found that the typical Edmonton family was willing to commute 50 minutes to work in order to retain a single-family dwelling. Correspondingly, for a family to choose a duplex over a single family home they would require a time savings of 50 minutes in the commute to work.

According to the 1997 *Key Choices Report*⁴⁰, as travel distances become longer the proportion of trips that are within walking distance will decline. This may be accentuated by the fact that an older population may be less inclined to walk to their destinations. A denser more compact urban form, when combined with other measures can contribute to a reduction of trip lengths, greater incidence of walking as a travel mode and more efficient transit operations. However the survey cautions that intensification on it's own will have marginal effects on reducing travel times and that Edmontonians strongly value the single family home and will resist attempts to shift to denser development.

Among the findings in the *Key Choices Report*:

- If transit improved the majority of respondents would not be significantly affected
- Respondents felt that the City should not reduce spending on transportation services
- Respondents felt that the City should not place restrictions on suburban development
- Drivers cite transit as being unreliable, and taking too long as reasons for not taking transit
- 80% of respondents lived in single family homes and of these only 15% saw themselves in a townhouse ten years later.

Environment

Trends in Emissions

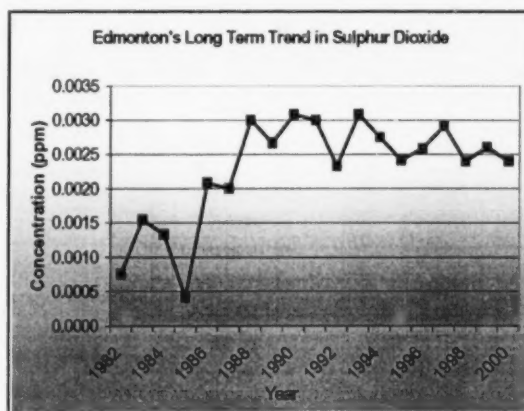
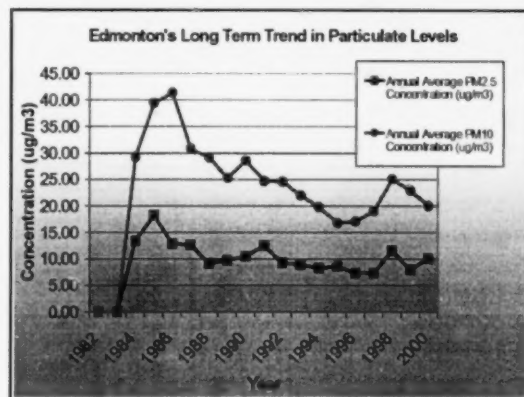
Automobile emissions are the leading source of pollution in Edmonton. Automobile ownership is up 60% since 1982 yet emissions from automobiles are declining.

Over the last ten years most emission indexes for the City of Edmonton have been dropping. This can be attributed to lower emissions from automobiles due to more efficient automobile engines, the removal of lead from gasoline and improved emission control technology on exhaust systems. Alberta Environment reports that carbon monoxide levels are down over 60 percent and that nitrogen dioxide levels are down 30 percent since 1982. These reductions were achieved despite a 60 percent increase in automobile ownership.⁴¹ Despite these reductions in emissions, according to Alberta Environment based on ambient air quality data, motor vehicles are the largest polluters in Edmonton.⁴²

Levels of sulphur dioxide emissions in the Edmonton Capital Region have more than doubled since 1982, and this trend is expected to continue due to an increasing reliance on energy derived from burning fossil fuels. Sulphur dioxide is created primarily through burning fossil fuels such as coal and natural gas⁴³, and these are the primary sources of energy in Alberta. Sulphur dioxide is the primary component to acid deposition (commonly referred to as acid rain) and irritates the elderly and other sufferers of heart and respiratory ailments.^{44/45} Levels of sulphur dioxide in Edmonton remain well below the hazardous levels despite gains in emissions.⁴⁶ Graphs on the following page demonstrate the reduced trends in most emissions. The

exception to this trend is in sulphur dioxide levels.⁴⁷ Data displaying the long-term trends in Edmonton emissions levels are courtesy of Alberta Environment.

Emission Trend Diagrams



Environment

Trends in Emissions

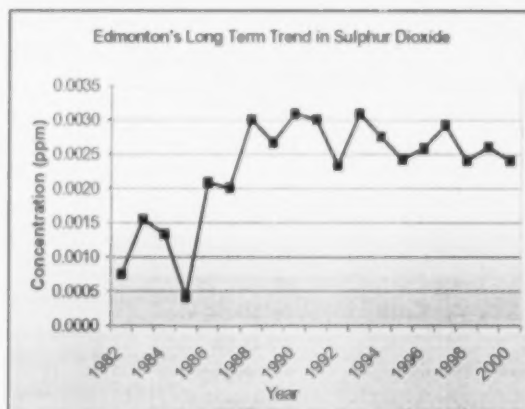
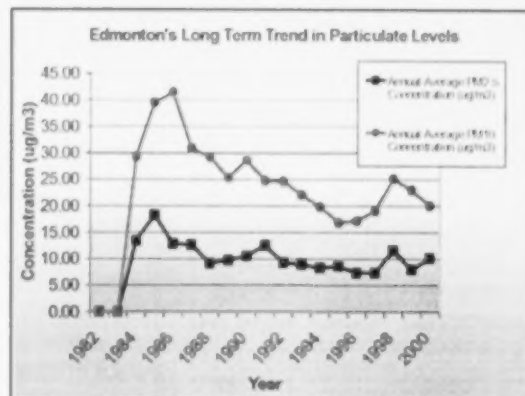
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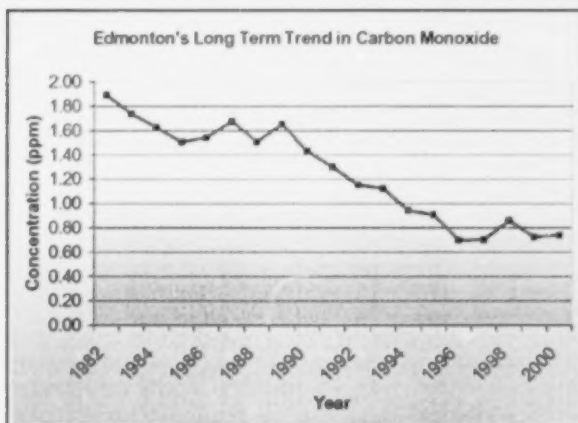
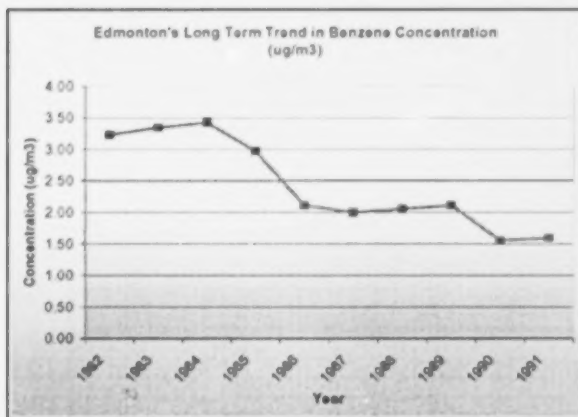
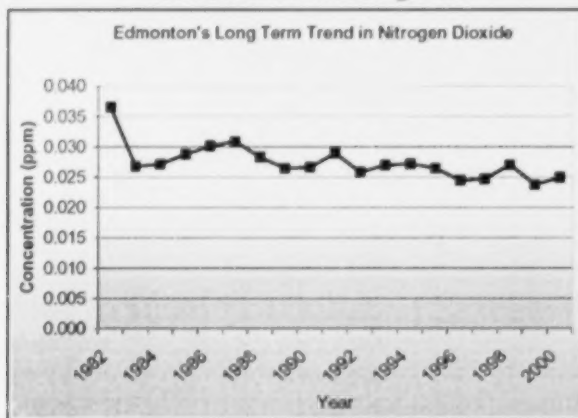
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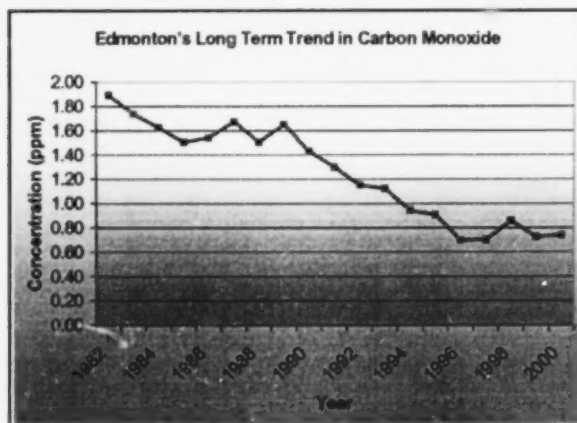
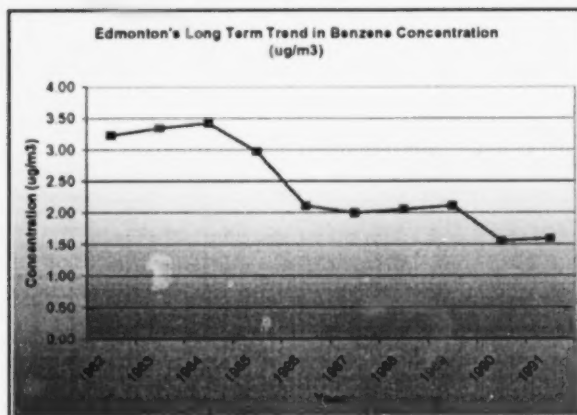
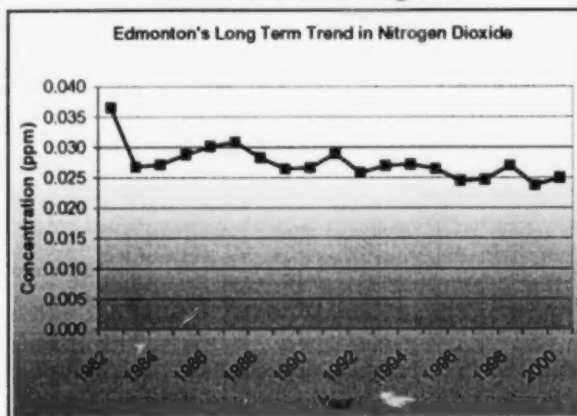


Emission Trend Diagrams



Charts and data
provided courtesy
Alberta Environment

Emission Trend Diagrams



Charts and data
provided courtesy
Alberta Environment

Socio-Economic Situation

Place of Work

Currently 78 % of Edmonton's labour force lives in the City.

Edmonton is fortunate in that a large proportion of its population is living and working within the boundaries of the City. This is good because it means that money spent during the working day is spent in the City, and that the infrastructure that these people use is being paid for by their taxes. Currently 78% of the labour force in Edmonton lives in the City. The remaining 23% of the work force commutes in from the surrounding member municipalities of the Census Metropolitan Area (CMA)⁴⁸.

It is desirable to have most of the employment remain within the boundaries of the City because it is easier to accommodate the shorter travel distances. Many of the surrounding CMA communities are bedroom communities with less than half of their residents working in these communities. According to 1996 Statistics Canada numbers, only 33% of Leduc residents work in Leduc, and in both Strathcona County and the City of St. Albert less than 24% of residents work in their community⁴⁹.

Works Cited/Sources

¹ Figures from Corporate Planning and Policy Section.

² Foot, David, "Boom, Bust and Echo", 1996

³ *Edmonton Socio-Economic Outlook 2001-2006*, March 2001 ed. Prepared by The City Forecast Committee, City of Edmonton Planning and Development.

⁴ CMHC. "Living in the City: lasting trend of just a fad?" *Canadian Housing Markets* 2nd Qtr. 1999.

⁵ *Edmonton Demographic Profile 1999*. City of Edmonton Planning and Development.

⁶ *City of Edmonton Monthly Economic Review*, April/May 2001 ed. City of Edmonton Planning and Development.

⁷ *Edmonton Socio-Economic Outlook 2001-2006*, March 2001 ed. Prepared by The City Forecast Committee, City of Edmonton Planning and Development.

⁸ - same as above -

⁹ Brian Hollohan. Canadian Mortgage and Housing Corporation. Speech. Banff, Alberta, October 28, 2001.

¹⁰ *Edmonton Demographic Profile 1999*. City of Edmonton Planning and Development.

¹¹ - same as above -

¹² *Condensed Summary of All Questions Report*. 1999 Civic Census. City of Edmonton, March 13, 2000.

¹³ - same as above -

¹⁴ *Edmonton Population and Employment Forecast Study*. Prepared for the City of Edmonton by Applications Management and Consulting Ltd. November 2001.

¹⁵ *City of Edmonton History of Annexations Map*. City of Edmonton Planning and Development Information Systems Services. 1994.

¹⁶ *2001-2003 Business Plan*. City of Edmonton Planning and Development Department. October 2000.

¹⁷ EULIS Municipal Comparison Project. Planning and Development Corporate Planning and Policy Section. November 2001.

¹⁸ *Housing Now*. Edmonton edition. January 1981 to September 2001. Canadian Mortgage and Housing Corporation.

¹⁹ *City of Edmonton 2001 Mean Residential Density by Standard Neighbourhood Map*. Data from TACS and 1999 Civic Census. City of Edmonton Planning and Development Department. October 2001.

²⁰ Kenworthy, Jeffery and Laube, Felix B. *An International Sourcebook of Automobile Dependence in Cities 1960-1990*. Boulder, Colorado: University Press of Colorado, 1999.

²¹ 1999 Civic Census and Approved Plans. City of Edmonton Planning and Development.

²² *Planning and Subdivision of Agricultural Land in Edmonton 1997 to 2000*. City of Edmonton, Planning and Development. October 2001.

²³ *Edmonton Socio-Economic Outlook 2001-2006*, October 2001 ed. Prepared by The City Forecast Committee, City of Edmonton Planning and Development.

²⁴ - same as above -

²⁵ - same as above -

²⁶ *City of Edmonton 2002-04 Corporate Business Plan*. City of Edmonton Corporate Services. 2001.

²⁷ *Population of Census Metropolitan Areas*. Statistics Canada, CANSIM II, table 051-0014 and Catalogue 91-213-XIB. October 25, 2001.

²⁸ - same as above -

²⁹ *Housing Now*. Edmonton edition. January 1981 to September 2001. Canadian Mortgage and Housing Corporation.

³⁰ *City of Edmonton Monthly Economic Review*, November/December 2000 ed. City of Edmonton Planning and Development.

³¹ *Census 96 Nation Series Complete Edition*. CDROM, Statistics Canada. Ottawa: Minister of Industry, 1998.

³² *City of Edmonton 1999 Civic Census and Statistics Canada 1996*.

³³ Murphy, Kathy. Driver Safety, Research and Traffic Safety Initiative. Transportation Safety Services Division, Alberta Transportation. Edmonton AB. October 11, 2001.

³⁴ *Transportation Master Plan: Household Travel Survey Project Report*. Prepared for the City of Edmonton Transportation Department by

Applications Management Consulting Ltd. May 1995.

³⁵ - same as above -

³⁶ - same as above -

³⁷ - same as above -

³⁸ Transportation and Streets data from Fall 2000 Station Count. Provided via fax on August 21, 2001.

³⁹ *Core Vales Tradeoff Study*. Prepared for the City of Edmonton Transportation Department by Hunt Analytics. December 1996.

⁴⁰ *Transportation Master Plan: Key Choices Reports*. City of Edmonton Transportation and Streets Department. April 1997.

⁴¹ Gilmour, Bob. "Auto pollution declines sharp." *Edmonton Journal* November 6, 2001: A1 & A8.

⁴² Alberta Environment. Bob Myrick - Air Quality Analyst. Edmonton, Alberta, January 2, 2002.

⁴³ Environment Canada. *Acid Rain Fact Sheet*. http://www.msc.ec.gc.ca/cd/factsheets/acidrain/index_e.cfm Accessed January 15, 2001.

⁴⁴ Miller, G. Tyler. *Living in the Environment*. Belmont, California: Wadsworth Publishing Company, 1998.

⁴⁵ Environment Canada Website: http://www.ec.gc.ca/air/acid-rain_e.shtml

⁴⁶ Alberta Environment. Bob Myrick - Air Quality Analyst. Edmonton, Alberta, November 07 2001.

⁴⁷ Alberta Environment. Bob Myrick - Air Quality Analyst. Edmonton, Alberta, November 07 2001.

⁴⁸ *Census 96 Nation Series Complete Edition*. CDROM, Statistics Canada. Ottawa: Minister of Industry, 1998.

⁴⁹ - same as above -

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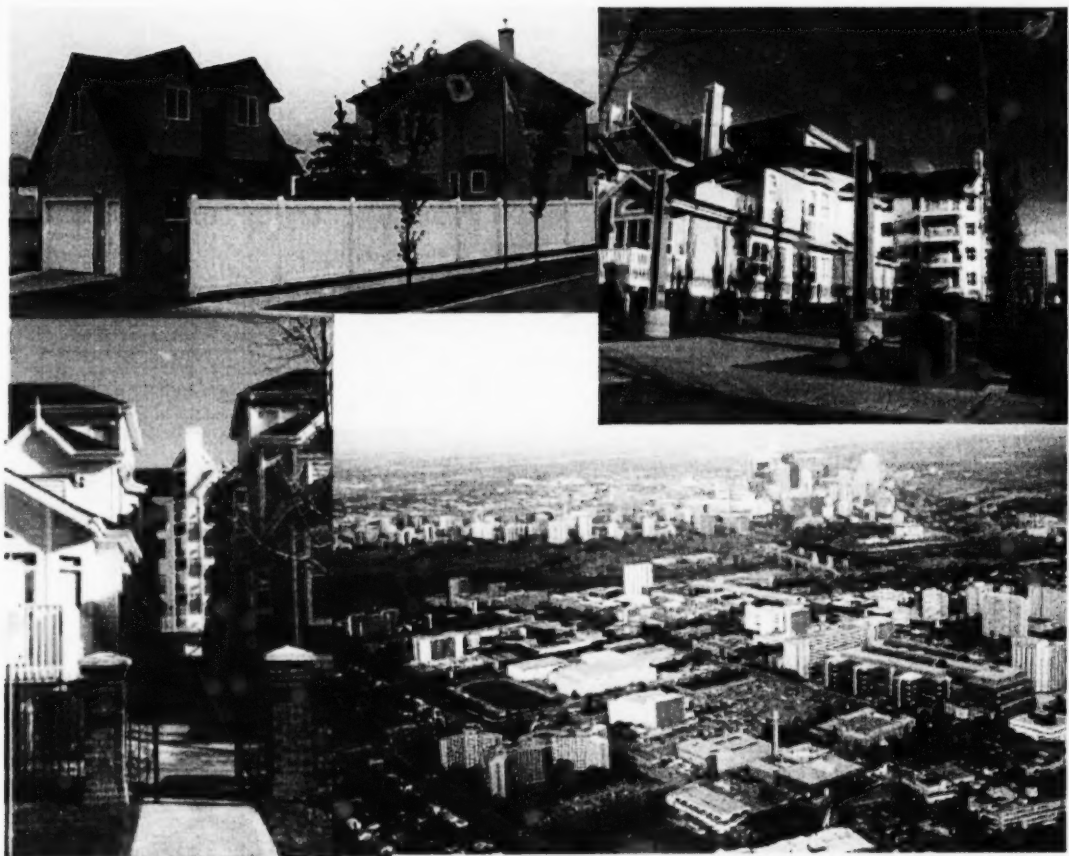
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Edmonton's Urban Land Intensification Strategy

Audit Report Two: Municipal Comparisons



January 18, 2002

THE CITY OF
Edmonton

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Introduction

This report examines urban land intensification indicators for 13 municipalities across Canada and the United States. The study compares Edmonton with other cities in terms of various indicators to see how Edmonton ranks. This information is valuable as it gives insight as to Edmonton's level of intensification and brings attention to areas where Edmonton may need to improve.

Data for the study was collected over a four month period between July and October 2001. A questionnaire was sent to 12 cities (in addition to Edmonton). Data collected through the questionnaire is for the cities proper (not the entire metropolitan area) and is used for most of the Land Use Section. For the Transportation Section, the primary sources of data were the Transportation Association of Canada and the *International Sourcebook of Automobile Dependence in Cities 1960-1990* by Jeffrey R. Kenworthy and Felix B. Laube, as well as Statistics Canada. Environmental data was provided by Alberta Environment.

The municipalities that were chosen to be part of this municipal comparison include three American cities (Atlanta, Denver, and Portland), and ten Canadian cities or municipalities (Calgary, Edmonton, Hamilton, Ottawa, Surrey, Vancouver, Winnipeg, Leduc, Sherwood Park, and St. Albert).

The American cities were included so that Edmonton could be compared to cities that have grown outside the Canadian experience and context. Specifically, Portland was chosen because it has been an early pioneer of growth control measures and established an urban growth boundary in 1973. Atlanta was chosen due to its

characterization of rapid growth without the use of growth management rules. Denver was selected because, similar to Edmonton's situation, many individual municipal governments have jurisdiction in the Denver region, with no political entity possessing the authority to manage growth in the region.

When selecting Canadian municipalities for the survey, cities with a population near to that of Edmonton's were chosen, with representation from as many parts of Canada as possible. Also, municipalities near Edmonton were selected so that Edmonton could be compared to its closest neighbours.

In some cases, municipalities did not respond fully to the survey. The tables and data interpretation reflect these limitations.

Land Use

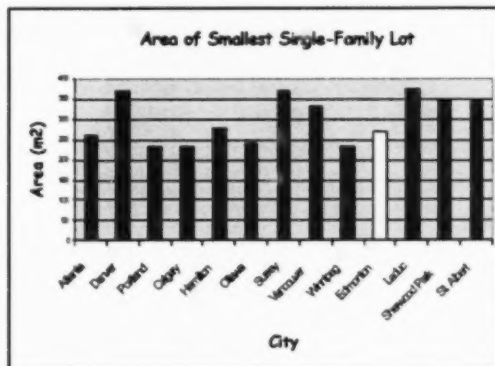
Small Lots

Smaller lots put more houses in a smaller land area. Edmonton is in the middle of the pack in terms of the area of the smallest single family lot.

One way to determine the intensity of land use in new neighbourhoods is to examine the area of the smallest single-family lot allowed in a municipality's zoning bylaw. In a survey of 13 cities across Canada and the United States, Edmonton's smallest lots ranked 7th with an area of 270 m² (2,906 sq. ft.) in its residential planned lots (RPL) zone. Winnipeg and Portland's small lots ranked first and second with an area of 232 m² (2,497 sq. ft.) while Leduc ranked 13th with an area of 374 m² (4,026 sq. ft.). When we compare Edmonton's value of 270

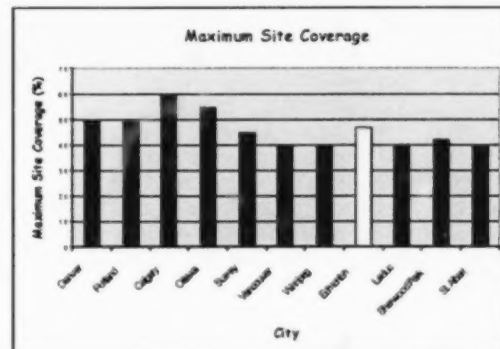
m² with the average of the 13 cities surveyed (300m² or 3,229 sq. ft.), Edmonton's smallest lots are about 30 square metres (323 sq. ft.) smaller.

When comparing Edmonton to its 3 surrounding municipalities we discover that the area of the smallest single-family lot is distinctly lower in Edmonton. The average (smallest single-family lot size) is 358 m² (3,853 sq. ft.) in Leduc, Sherwood Park, and St. Albert compared to 270 m² in Edmonton. Again, this is an indication that, in some of Edmonton's new neighbourhoods, the intensity of development is greater than in these three surrounding municipalities.



Maximum Site Coverage

Allowing a larger proportion of a lot to be covered by a building increases the density of structures. Edmonton's maximum site coverage is just above the average for the cities surveyed.

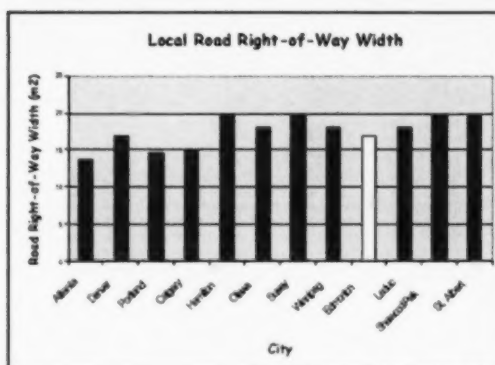


As well as the size of lots in new neighbourhoods, the portion of the lot that can be covered by a building is also an indicator of intensification. For the smallest single-family lots allowed in a municipality's zoning bylaw, 11 cities prescribe a maximum site coverage. Of these 11 cities, Edmonton has the 5th highest maximum site coverage at 47%. The highest site coverage allowed is 60% in Calgary and 4 cities are tied for the lowest maximum site coverage at 40%. Edmonton's maximum site coverage is slightly higher than the average for the 11 cities (46%) and about 6% higher than the average for the 3 municipalities surrounding Edmonton (40%). The cities of Atlanta and Hamilton have no specified maximum site coverage limitation.

Local Road Right-of-Way Width

The less land used for roads, the more land can be devoted to other land uses. Edmonton has one of the smaller road right-of-ways, when compared to other cities.

The amount of land that is allotted to roads also has an influence on the intensity of development. The more space used for road right-of-ways, the more likely a neighbourhood is to be spread out.



Of the 12 cities that responded with an answer to this question, Edmonton tied for fourth lowest local road right-of-way width at 17 metres. Atlanta has the narrowest new local road right-of-way at 13.7 metres and four cities are tied for the widest right-of-way at 20 metres. Edmonton's width of 17 metres is slightly less than the average of all cities in the survey. It is important to take into account that some of the cities in the survey would not have a need for snow-removal equipment and snow storage. This might have an effect on the minimum width of new local roads that Edmonton could achieve. Vancouver does not appear on the above graph as the City is essentially built out.

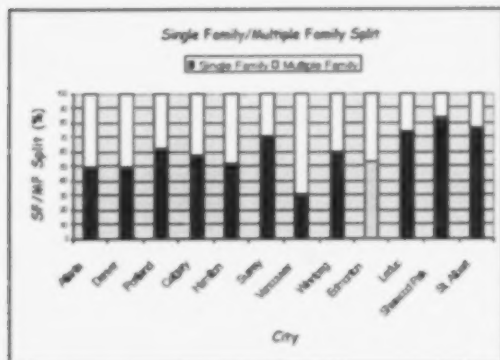
Edmonton requires a minimum local road width to ensure that emergency, waste management, and snow removal vehicles can access all roads in new communities. In terms of minimum local road width (curb to curb), the City of Edmonton's Design and Construction Standards Manual has a 9 metre minimum, however, slight deviations have occurred in some new neighbourhoods such as Terwillegar Towne. The elimination of on-street parking or some other type of concession is necessary to ensure emergency and service access if deviations from the 9 metre minimum are made.

When Edmonton's local road right-of-way width is compared to the average width for Leduc, Sherwood Park and St. Albert we see that Edmonton's value is about 2 metres narrower. This could be an indication that new neighbourhoods in Edmonton devote less land to roads than in these three surrounding municipalities.

Single Family vs. Multi-Family Dwelling Units

A higher percentage of multi-family means less land is needed for housing. Edmonton compares favourably with other municipalities when comparing the number of existing single family units to multiple family units.

The single family vs. multiple family split is a comparison of the number of single family dwelling units versus the number of multi-family dwelling units provided in a city expressed as a percentage. As there are different ways of measuring what differentiates single family and multiple family dwellings, for the purpose of this study multiple family units include existing apartments, rowhousing, duplex, and semi-detached dwellings.



When we look at the single family vs. multiple family chart we see that Edmonton compares favourably with other municipalities. Of 12 cities, Edmonton ranked fifth highest in multi-family units at 47%. Vancouver reported the highest value at 70% while Leduc consists of 26% multi-family. Vancouver's high multi-family percentage can be attributed to its central location in a group of cities and the fact that most of its residential dwellings are not single family. The average for the 12 cities is about 40% multi-family which is about 7% lower than Edmonton.

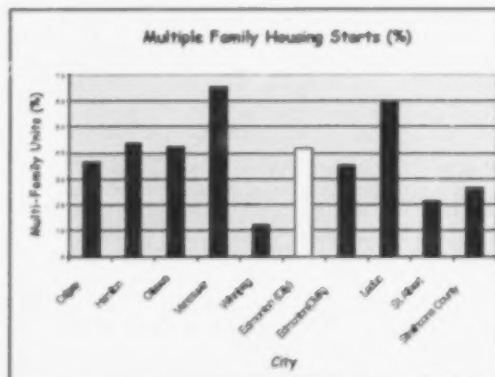
When the percentage of multi-family in Edmonton is compared to the average for Leduc, Sherwood Park, and St. Albert we see that Edmonton compares very well. Edmonton has about 25% more multi-family than the average of these three municipalities (22%).

Multiple Family Housing Starts

The percentage of multiple family housing starts is an indication of a trend to denser development. Edmonton ranks in the middle when it comes to multiple-family housing starts.

The percentage of recent multiple family housing starts is also an indication of the

amount of land that will be used for more intense development. Over the last two years, 41% of Edmonton's housing starts were for multiple family dwellings, 6th highest among eleven municipalities. Vancouver ranked 1st with 65% multi-family permits and Winnipeg 9th with 12%. The average multi-family housing start percentage for the nine municipalities is 39%, about 2% lower than Edmonton's value. When comparing City of Edmonton values with that of the entire Edmonton CMA (35%), we see that over the last two years Edmonton had 6% more multiple family starts. The average multi-family housing start percentage for Leduc, St. Albert and Strathcona County (36%) is approximately 5% lower than Edmonton's multi-family housing starts over the same period. The City of Leduc's high multiple family housing start count can be partially attributed to several large rental and condominium apartment complexes coming on stream in 2001.

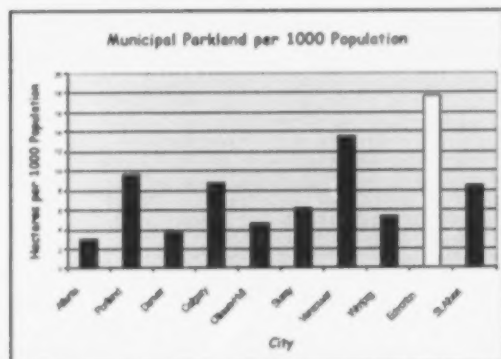


Data courtesy CMHC and is from January 2000 – November 2001

Public Park Land

The provision of parkland contributes to the quality of life in a city. Edmonton has more municipal parkland per person than any other city.

The amount of parkland in a city is often cited as a major factor in the quality of life for the residents of a city. Regardless of the fact that more greenspace in a city most likely means that a city will be more spread out, people enjoy and value their parkland. At 17.7 hectares of parkland per 1000 people, Edmonton has more municipal parkland per person than any other city, with 67% of Edmonton's municipal parkland in the North Saskatchewan River Valley. Atlanta has the least parkland per 1000 people at 3.1 hectares and the average for the cities surveyed is 8.1 hectares per 1000 people.



Calgary, Ottawa-Hull, Vancouver and Edmonton data courtesy of Economic Development Edmonton
All other data from questionnaire

Land Reserved for Future Urban Development

Future Urban Development

The amount of land that is reserved by a city for future development is an indication of the capacity for growth within current municipal boundaries. Edmonton has considerably more room to grow than some other cities.

The amount of land within a city's boundaries that is not yet developed to an urban standard is a rough estimation of the area a city has to grow before expanding its boundaries.

Edmonton has approximately 18,000 hectares (44,000 acres) of land within its boundaries that are not presently covered by an existing Outline or Area Structure Plan, which specify areas allocated for urban development. This is high compared to the municipalities in Canada that responded to the survey.

Land Reserved for Future Urban Development

Municipality	Area (ha)
St. Albert	0
Leduc	2,000
Calgary	5,000
Winnipeg	7,000
Edmonton	18,000

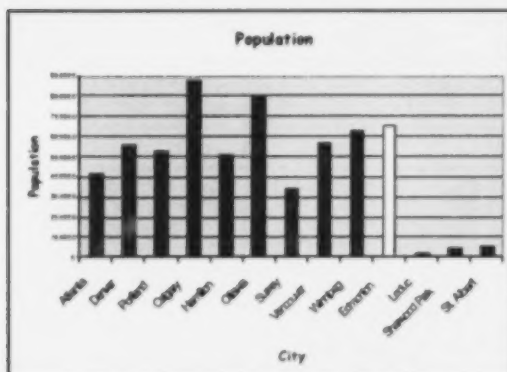
*Rounded

Population and Development Densities

Population

Edmonton's population is 3rd highest of the 13 cities surveyed.

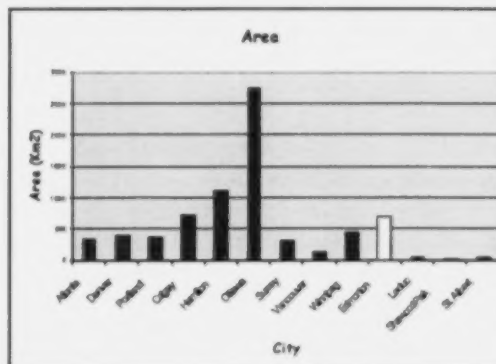
Edmonton's population of 648,248, in 1999, ranked third highest of the 13 cities surveyed. It is important to note that the data collected is for the cities and not the entire metropolitan area. Calgary had the highest population at 876,519 and Leduc the lowest at approximately 15,000 people.



Area

Edmonton's area ranks 4th highest among the cities surveyed.

The area of Edmonton is 700 square kilometres (km²) and ranks 4th highest among cities surveyed. The largest city is Ottawa at 2,758 km² (due to their recent amalgamation with surrounding municipalities) and the smallest is St. Albert at 36 km². These numbers represent the gross area of the city and include rivers, industrial and commercial land, and parks.



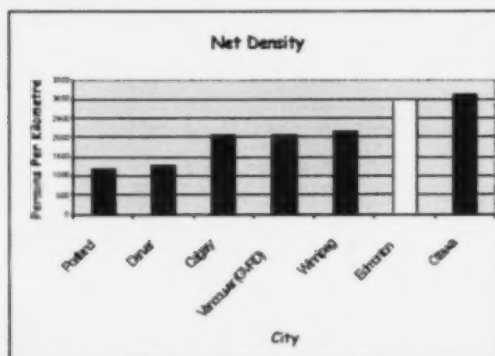
Net Density

Net density incorporates developed land and excludes land uses such as agriculture, large-scale open space and forest. Edmonton compares favourably with other cities when we examine net density.

Although simply dividing population by area gives us a rough idea of the density of a city, excluding all agricultural land, forest, large-scale open space and undeveloped areas from the calculation will produce a net density which may prove more useful for comparative purposes. In this comparison of net densities, the metropolitan area is defined as closely as possible to the functional urban area of the city. In the cases of Vancouver, Ottawa, Portland and Denver, adjacent communities surrounding the city are included.

When we examine the net densities of cities, we see that Edmonton ranks second highest with a net urban density of 2,990 persons per square kilometre. Ottawa has the highest net density at 3,130 persons per square kilometre and Portland the lowest with a net density of 1,170 persons.

Edmonton's net urban density of 2,990 persons per square kilometre (km^2) is about 870 people higher than the overall average value of 2,119 persons per km^2 . When we compare Edmonton to the average of the Canadian cities (2,482 persons per km^2), we see that Edmonton has about 500 more people per km^2 . Edmonton's value is about 1,700 people higher than the average of the two American cities (1,225 persons per km^2).



Source: Kenworthy and Laube (Data 1990)

Gross Density (Population/Area)

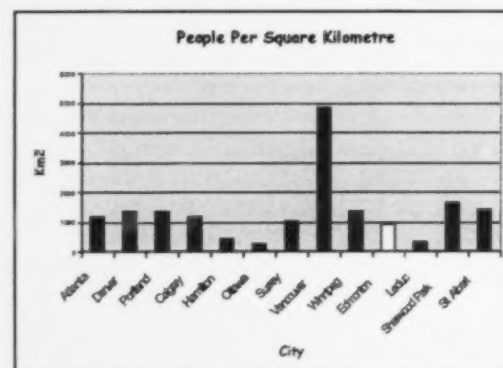
The number of people in an area is an indication of density. Only 3 cities have less people per square kilometre than Edmonton but the area of the river valley and Edmonton's agricultural lands are included in this calculation and should be taken into account.

The gross density of a city can be determined by dividing population by area. This will give a measurement of people per square kilometre.

Edmonton has 926 people per square kilometre. Only the cities of Hamilton, Leduc and Ottawa have less people per square kilometre. Vancouver has the most people

per square kilometre at 4,879 while Ottawa has the least at 287. Vancouver's high value can be attributed to its large number of apartments and other multiple family dwellings. Ottawa has recently amalgamated much rural land and this would be the main reason for its very low person per square kilometre value. Since the net density calculation only incorporates developed land, Ottawa's high net density in comparison to its gross density is at least partially due to the fact that the net density calculation is based on numbers collected before Ottawa's recent amalgamation. It is also important to note that Edmonton's large river valley and extensive agricultural lands are included in the gross area.

When we compare Edmonton's persons per square kilometre to that of the average of Leduc, Sherwood Park, and St. Albert (1,171 people per square kilometre) we find that Edmonton has about 250 less people per square kilometre.

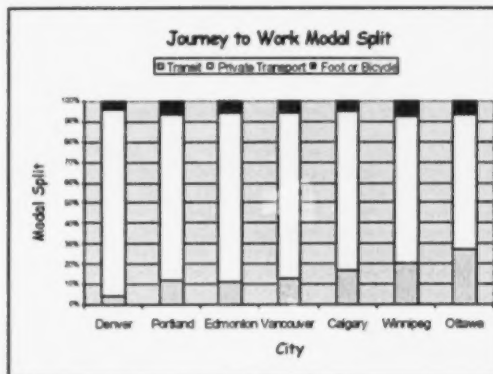


Transportation

Modal Split

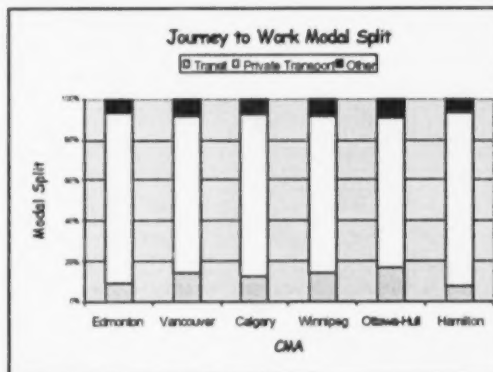
The type of transportation that a person uses to commute to and from work is an indication of how reliant commuters are on the private automobile versus other modes of transportation. The car is the dominant mode for the journey to work for all cities surveyed.

Edmonton's car and transit share for the journey to work is similar to other Canadian cities of similar size. 83% of Edmontonians drive to work in a private vehicle (this includes both drivers and passengers), 11% use transit and 6% walk or bike. Only the residents of Denver and Portland drive to work more than Edmonton's residents. Denver has the highest percentage of people who use private transportation to get to work at 91% and Ottawa the lowest at 66%. Relying on private vehicles to get to work increases the congestion of streets, contributes to pollution, and can be an indication of the availability of transit and the density of residences around transit routes. 6% of Edmontonians walk or bike to work which is slightly lower than the average of 6.2%. The number of people who walk or bike to work falls between 4-8% for all cities.



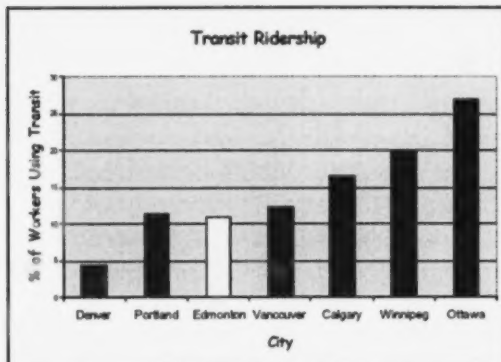
Source: Kenworthy and Laube (Data 1990)

1996 Statistics Canada data for Census Metropolitan Areas (CMA) shows a similar breakdown for the journey to work modal split, however slight variations exist between the sources of data.



Source: Statistics Canada (1996)

The transit ridership portion of the modal split shows that 11% of Edmonton's workforce use public transit to get to work. The average for the Canadian cities is 17.4% and the overall average is 14.7%. Ottawa's workforce uses public transportation the most at 27% and Denver commuters the least at 4.4%.

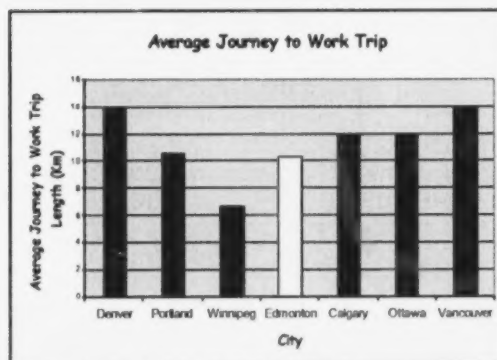


Source: Kenworthy and Laube (Data 1990)

Average Trip Length

The distance a person travels to work is an indication of the proximity of one's home and workplace. Edmonton ranks 2nd best when we measure average journey to work trip length.

Edmonton's average journey to work trip length of 10.3 kilometres is 2nd only to Winnipeg's 6.6 km distance. Edmonton commuters travel about 1 km less than the overall average journey to work trip length of 11.3 kilometres. Shorter trip lengths can contribute to lower vehicle emissions and less congested streets.

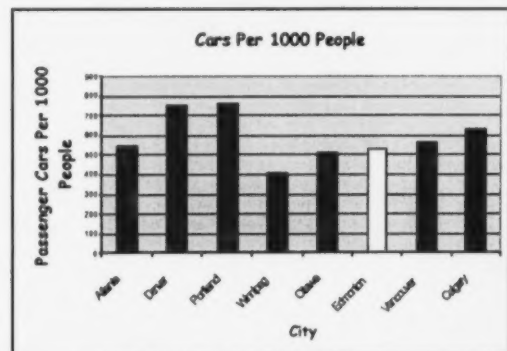


Source: Kenworthy and Laube (Data 1990)

Car Ownership

The number of people who own a car is an indication of a population's reliance on the private automobile for transportation. Edmonton ranks third lowest when we examine car ownership trends.

Edmonton ranked third lowest with 527 passenger vehicles per 1,000 people. The lowest value is 412 passenger vehicles in Winnipeg. The highest value is 763 passenger vehicles in Portland. Edmonton's value is approximately 60 passenger vehicles per 1000 people lower than the average of all cities (588 passenger vehicles per 1000 people). When we compare Edmonton to the Canadian cities, Edmonton's 527 passenger vehicles is almost the same as the average (529 passenger vehicles per 1000 people).



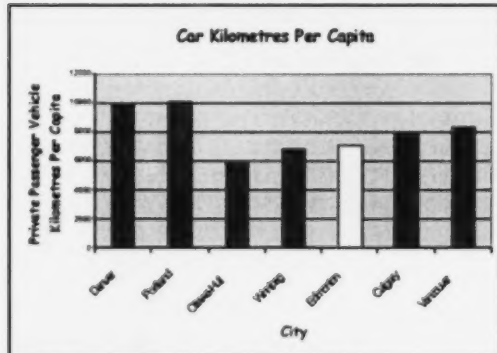
Source: Kenworthy and Laube (Data 1990)

Atlanta data courtesy of Georgia State DMV (Fulton County)

Annual Car Use Per Capita

The distance a person drives in a car per year is an indication of auto-dependence. Edmonton ranks third lowest when we examine car kilometres driven per capita.

Determining the distance driven by individuals is a difficult statistic to collect. Due to this fact, the numbers in this section are rounded to the nearest 100. The average Edmontonian drives approximately 7,100 kilometres per year in their car, compared to the highest value of about 10,100 kilometres in Portland and 5,900 kilometres in Ottawa-Hull. The average Edmontonian drives their car approximately 150 kilometres less than the average driver from all the Canadian cities. The less auto-dependent a city is, the more likely alternate modes of travel will be popular.



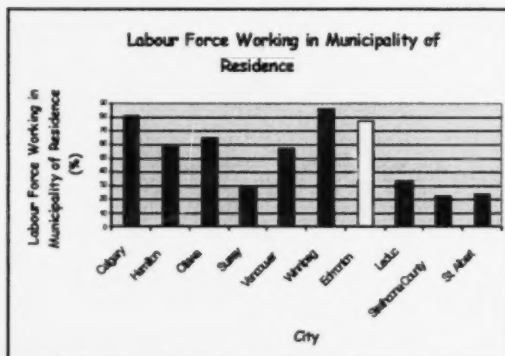
Source: Kenworthy and Laube (Data 1990)

Location

Place of Work Status

The percentage of a city's labour force that works in the city is an indication of the number of jobs that exist near a person's place of residence. Edmonton ranks 3rd best with 78% of its labour force working inside Edmonton.

When we look at the percentage of a city's workforce whose place of work and residence are within the same city, we see that Edmonton compares well. Out of ten municipalities, Edmonton ranks third with 78% of its workforce working inside Edmonton's borders. Winnipeg ranked first at 85% and Strathcona County 10th at 23%. The average of all municipality's is approximately 24% less than Edmonton's value. The four lowest values are for Surrey, Leduc, St. Albert and Strathcona County, all satellite communities surrounding a larger centre. If we compare Edmonton's value to the average for all other cities (71%) we see that approximately 7% more people in Edmonton work and reside in the same city than in these cities. A higher percentage of people who live and work in the same city increases the likelihood of a shorter home-work trip distance, less gasoline consumption and, therefore, a cleaner environment.



Data Courtesy of Statistics Canada (1996)

Environment

Transportation indicators such as private vehicle use, transit ridership, and average trip length all affect pollutant levels and this relationship provides a reason for examining pollutant levels. The major automotive emissions of concern to health are carbon monoxide, nitrogen dioxide, sulphur dioxide, benzene, and particulate matter, as well as the major component of photochemical smog, ground level ozone.

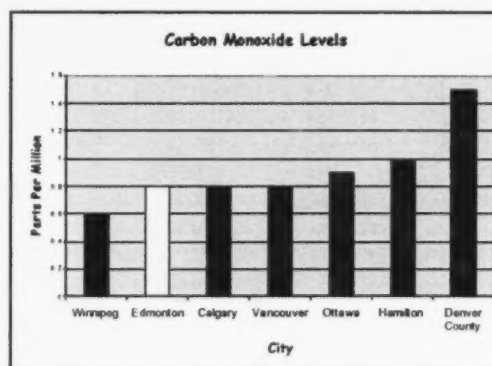
Pollutants

Several pollutants are contained in automobile emissions. Edmonton compares favourably with other cities when we examine these pollutant levels.

In Edmonton, we enjoy air quality that is better than most other Canadian cities. Concentrations of urban air pollutants in Edmonton are close to values observed at other cities of similar size and population. Cities in the east tend to experience higher concentrations of pollutants due to local industries and transport of pollution from the eastern United States. Environmental data was provided by Alberta Environment.

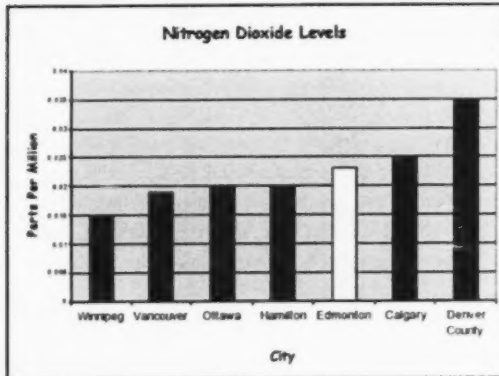
Carbon Monoxide Levels

Emissions of carbon monoxide from motor vehicles are linked closely to issues of transportation energy use. The level of dependence on private vehicles and the number of kilometres an average person drives both effect CO levels. The average carbon monoxide concentration in Edmonton from 1990 to 2000 was 0.8 ppm (parts per million) compared to the average of 0.9 ppm for all cities. Winnipeg had the lowest value at 0.6 ppm and Denver County the highest at 1.5 ppm.



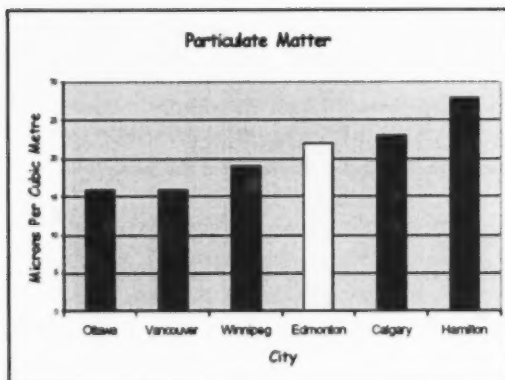
Nitrogen Dioxide Levels

Ambient nitrogen dioxide levels in Edmonton were 0.023 ppm based on data from 1990 to 2000. This value was slightly higher than the average of 0.022 ppm for all cities and slightly lower than Calgary's nitrogen dioxide level (0.025 ppm).



Particulate Matter Concentrations

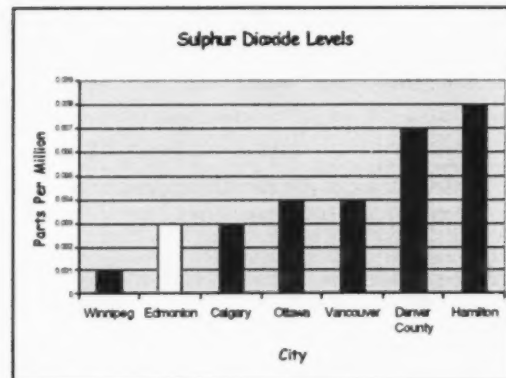
Inhalable particulate concentrations in Edmonton were 22 ug/m³ (micrograms per cubic metre) compared to values of 16 ug/m³ in Ottawa and Vancouver, and 28 ug/m³ in Hamilton. Edmonton's value is slightly higher than the average of 21 ug/m³ for all cities. Inhalable particulate levels in Edmonton (and Calgary) are comparable to larger cities because of the contribution of wind-blown dust and a dry climate.



Sulphur Dioxide Levels

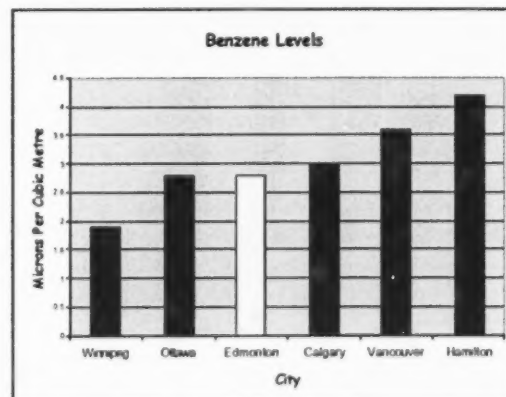
Sulphur dioxide concentrations in Edmonton are lower than in most other cities. Based on data from 1990 to 2000, the average

sulphur dioxide concentration in Edmonton was 0.003 ppm. Winnipeg had the lowest value at 0.001 ppm and Hamilton the highest at 0.008 ppm. Edmonton's value falls slightly below the average of 0.004 ppm for all cities.



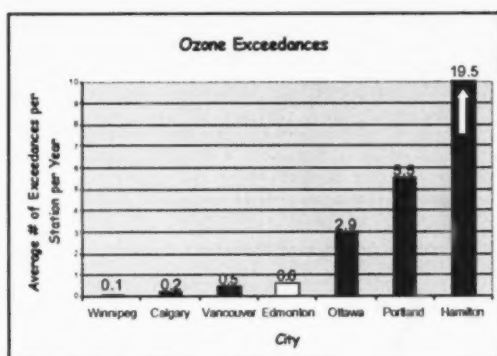
Benzene Levels

Benzene concentrations in Edmonton (2.8 ug/m³) are slightly lower than the average of 6 Canadian cities (3.1 ug/m³) where data is available. Winnipeg has the lowest benzene concentration at 0.9 ug/m³ and Hamilton the highest at 4.2 ug/m³.



Ozone Exceedances

Photochemical smog is formed through a complicated set of chemical reactions involving nitrogen and hydrocarbons. Ground-level ozone is a component of photochemical smog. In Edmonton, smog is not a major problem as exceedances of the one-hour guideline for ozone (0.082 ppm) generally occur only about one hour per year. This can be compared to Eastern Canada and other major cities where the guideline can be exceeded up to 20 hours per year.



Portland data courtesy of United States Environmental Protection Agency

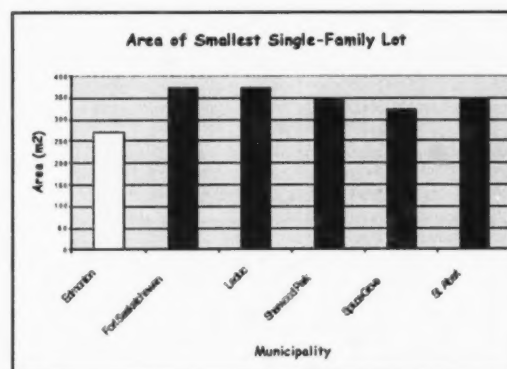
EDMONTON IN THE REGION

Many of the growth problems that face Edmonton apply to its urban neighbours as well. For this section, Fort Saskatchewan and Spruce Grove have been added to the comparison to give a snapshot of Edmonton and region in terms of a selection of development regulations and statistics.

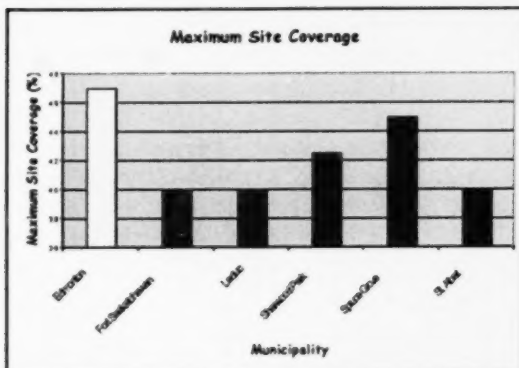
Development Regulations and Land Use Statistics

When we compare a selection of development regulations and statistics for Edmonton and its urban neighbours, we find that, in most instances, Edmonton permits a higher density of development.

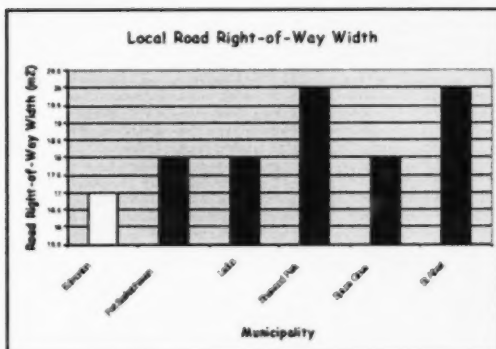
In terms of the smallest lot size for single-family lots, Edmonton provides the smallest lot size (270 m²). Edmonton's smallest lot is over 50 m² smaller than the smallest single-family lot in Spruce Grove, 80 m² smaller than in Sherwood Park and St. Albert, and approximately 100 m² smaller than the smallest single-family lot in Leduc and Fort Saskatchewan.



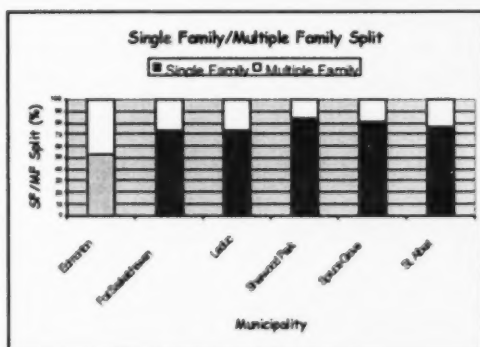
When we look at the maximum site coverage allowed on the smallest single-family lots, Edmonton's 47% coverage is 7% higher than Leduc, St. Albert and Fort Saskatchewan, 4.5% higher than Sherwood Park and 2% higher than Spruce Grove.



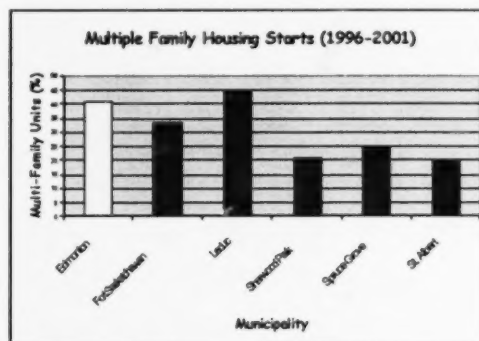
Edmonton has the lowest standard local road right-of-way width at 17 metres compared to 18 metres for Leduc, Fort Saskatchewan and Spruce Grove, and 20 metres for Sherwood Park and St. Albert.



Edmonton has the highest percentage of existing multiple family housing.



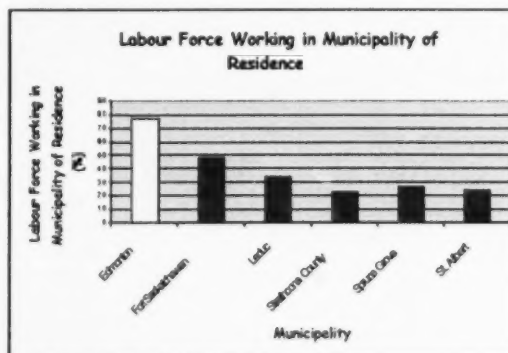
Leduc and Edmonton come first and second for the highest percentage of multiple family housing starts over the last six years.



Data Courtesy CMHC

Over the last two years (2000 and 2001), 72% of all multiple family housing starts in the Edmonton Census Metropolitan Area (CMA) were in the City of Edmonton.

When we look at the percentage of a city's workforce whose place of work and residence are within the same municipality, we see that 78% of Edmonton's workforce works inside Edmonton's borders. 48% of the Fort Saskatchewan workforce works in Fort Saskatchewan while 34% of the Leduc workforce works in Leduc. On the other end of the spectrum, Strathcona County and St. Albert have 23% of their workforce working in their own municipality.



Data courtesy Statistics Canada

Works Cited/Sources

Census 96 Nation Series Complete Edition. CDROM, Statistics Canada. Ottawa: Minister of Industry, 1998.

Edmonton Info 2000-2001. Economic Development Edmonton. August 2000.

Housing Now. Edmonton Edition. November 2001. Canadian Mortgage and Housing Corporation.

Kenworthy R. Jeffrey and Laube B. Felix. *An International Sourcebook of Automobile Dependence in Cities 1960-1990.* Boulder, Colorado: University Press of Colorado, 1999.

Monthly Housing Statistics. November 2001. Canadian Mortgage and Housing Corporation

Urban Transportation Indicators. Survey 2. Transportation Association of Canada. 1999.

Appendix 1 Questionnaire

Intensification Questionnaire

A) Housing, Population and Development Densities

1. What is the population of your city (year)?
2. What is the area of your city (year)?
3. Do you have established targets for development densities?
If so, what are they? Yes ☐ No ☐
4. Do you have a measurement for the density of development in your city?
If so, what is it? What is the method of calculation? Yes ☐ No ☐
5. Do you have a measurement for the ultimate population and/or population
density for the future development area as designated on the Municipal
Development Plan/General Plan/Official Plan?
If so, what is your projection? Yes ☐ No ☐
6. a) Do you have a measurement for the expected development densities in
planned and approved residential areas? If so, what is it? What is the
method of calculation? Yes ☐ No ☐

b) Do you have a measurement for the expected development densities in
planned and approved commercial areas?
If so, what is it? What is the method of calculation? Yes ☐ No ☐

c) Do you have a measurement for the expected development densities in
planned and approved industrial areas?
If so, what is it? What is the method of calculation? Yes ☐ No ☐
7. a) Do you have a measurement for the residential development density for the
existing built up residential areas (Please include the dwelling units per
hectare/acre as well as persons per hectare/acre)?
If so, what are your measurements? What is the method of calculation
and how is it reported? Yes ☐ No ☐

-
- b) Do you have a measurement for the commercial unit density for the existing built up commercial areas?
If so, what are your measurements? What is the method of calculation? Yes ☐ No ☐
- c) Do you have a measurement for the industrial unit density for the existing built up industrial areas?
If so, what are your measurements? What is the method of calculation? Yes ☐ No ☐
8. a) Do you have a measurement for the supply of residential vacant land that is available?
If so, what is it? What is the method of calculation? Yes ☐ No ☐
- b) Do you have a measurement for the supply of commercial vacant land that is available?
If so, what is it? What is the method of calculation? Yes ☐ No ☐
- c) Do you have a measurement for the supply of industrial vacant land that is available?
If so, what is it? What is the method of calculation? Yes ☐ No ☐
- d) Do you have a measurement of land reserved for future urban development?
If so, what is it? Yes ☐ No ☐
9. Do you have a measurement of the amount of land dedicated to public park land?
If so, what is it? What is the method of calculation? Yes ☐ No ☐

B) Housing Statistics and Lot Sizes

1. What is the percentage of existing Single-Family versus Multiple-Family Dwelling Units (year)?
2. What is the percentage of building permits by housing type issued over the last 2 years?
3. In terms of your municipality's zoning bylaw, for the zone that allows single-family housing with the smallest lot sizes:

- i What is the minimum lot size (width, depth, and area)?
 - ii What is the maximum site coverage allowed?
 - iii What is the minimum front yard setback?
 - iv What is the minimum side yard setback?
 - v What is the minimum rear yard setback?
4. What is the minimum standard road right-of-way width for the local roads in new subdivisions?

Appendix 2 Contacts

City/Municipality	Department	Contact
Calgary, Alberta	Planning and Transportation Policy	Ernie Park Tim Creelman
Edmonton, Alberta	Planning and Development	Colin Krywiak
Hamilton, Ontario	Planning and Development	Anne Winning Mary Lou Tanner
Ottawa, Ontario	Development Services	Robert Calladine
Surrey, British Columbia	Planning and Development	Barry Konkin Terry Hoff
Vancouver, British Columbia	Planning	Paul Nowlan
Winnipeg, Manitoba	Planning, Property, and Development	Deanne Johnson
Fort Saskatchewan	Planning and Engineering	David Blades Pearl Bothamley
Leduc, Alberta	Planning and Engineering Services	George Du Cloux Doug Parrish
Sherwood Park, Alberta	Planning and Development Review Services	Marica Clark David Smith
Spruce Grove, Alberta	Planning and Development	Pat Wankiewicz Lynn Gale
St. Albert, Alberta	Planning and Development Services	Curtis Cundy Jamie Brown
Atlanta, Georgia	Planning, Development, and Neighbourhood Conservation Atlanta Regional Commission	John Heath Guy Rousseau
Denver, Colorado	Planning and Development	Phillip Plenis
Portland, Oregon	Bureau of Planning Metro Regional Services	Mark Bello Kristin Hull

Appendix 3 Questionnaire Responses

City	Population	Area of City (km ²)	Municipal Parkland (ha/ 1000 persons)	Future Urban Development (ha)	Single Family - Multi Family Ratio	Multi - Family Housing Starts (%)
Atlanta	414,474 (2000)	340.8	3.1	N/A	49/51	N/A
Denver	554,636 (2000)*	400.4*	3.7	N/A	49/51	N/A
Portland	523,766 (2000)	375.5	9.7	N/A	62.4/37.6	N/A
Calgary	876,519 (2001)	721.73	8.8**	4694	58/42	36.3***
Hamilton	504,000 (2002 est)	1113.0	N/A	N/A	51.8/48.2	43.61***
Ottawa	791,300 (2000 est)	2758.0	4.6**	N/A	N/A	42.2***
Surrey	340,000 (2001 est)	318.67	6.2	N/A	70/30	N/A
Vancouver	566,000 (2000 est)	116.0	13.6**	N/A	30/70	65.25***
Winnipeg	629,800 (2000 est)	462.1	5.3	6880	59.4/40.6	12.33***
Edmonton	648,284 (1999)	699.8	17.7**	18000 (est)	52.6/47.4	41.6***
Leduc	14,540 (1999)	38.4	N/A	2072	73.8/26.2	60.1***
Sherwood Park	45,629 (2000)	27.0	N/A	N/A	83.7/16.3	26.7***
St. Albert	51,716 (2000)	35.73	8.5	N/A	76.5/23.5	21.21***

Appendix 3 Questionnaire Responses

City	Smallest Single Family Lot Size (m2)	Maximum Site Coverage (%)	Minimum front yard setback (metres)	Minimum side yard setback (metres)	Minimum rear yard setback (metres)	New Local Road Right of Way Width (m)
Atlanta	260	No limitation	6.1	1.5	1.5	13.7
Denver	371	50*	6.1	1.5	6.1	17
Portland	232	50*	3	1.5	1.5	14.6
Calgary	233	60	1.2	1.2	1.2	15
Hamilton	278	No limitation	6	1.2	7.5	20
Ottawa	240	55	3	0.6	7.5	18
Surrey	370	45	7.5	1.2	7.5	20
Vancouver	334	40	20% of depth	0.73 (10% of width)	45% of depth	N/A
Winnipeg	232	40	6.1	0.9	7.62	18
Edmonton	270	47	4.5	1.2	4	17
Leduc	374	40	6.1	1.2	6.1	18
Sherwood Park	350	42.5	6	1.2	7.5	20
St. Albert	350	40	6	1.35-2	10	20

Appendix 3 Questionnaire Responses

City	Supply of Residential Vacant Land (ha)	Supply of Commercial Vacant Land (ha)	Supply of Industrial Vacant Land (ha)
Atlanta	N/A	N/A	N/A
Denver	N/A	N/A	N/A
Portland	N/A	N/A	N/A
Calgary	N/A	N/A	2275
Hamilton	N/A	N/A	N/A
Ottawa	N/A	N/A	N/A
Surrey	324	121	1012
Vancouver	N/A	N/A	N/A
Winnipeg	445	N/A	N/A
Edmonton	464	N/A	4428
Leduc	1862	N/A	N/A
Sherwood Park	N/A	N/A	N/A
St. Albert	650	14	300

* Denotes data from web site

** Source: Economic Development Edmonton

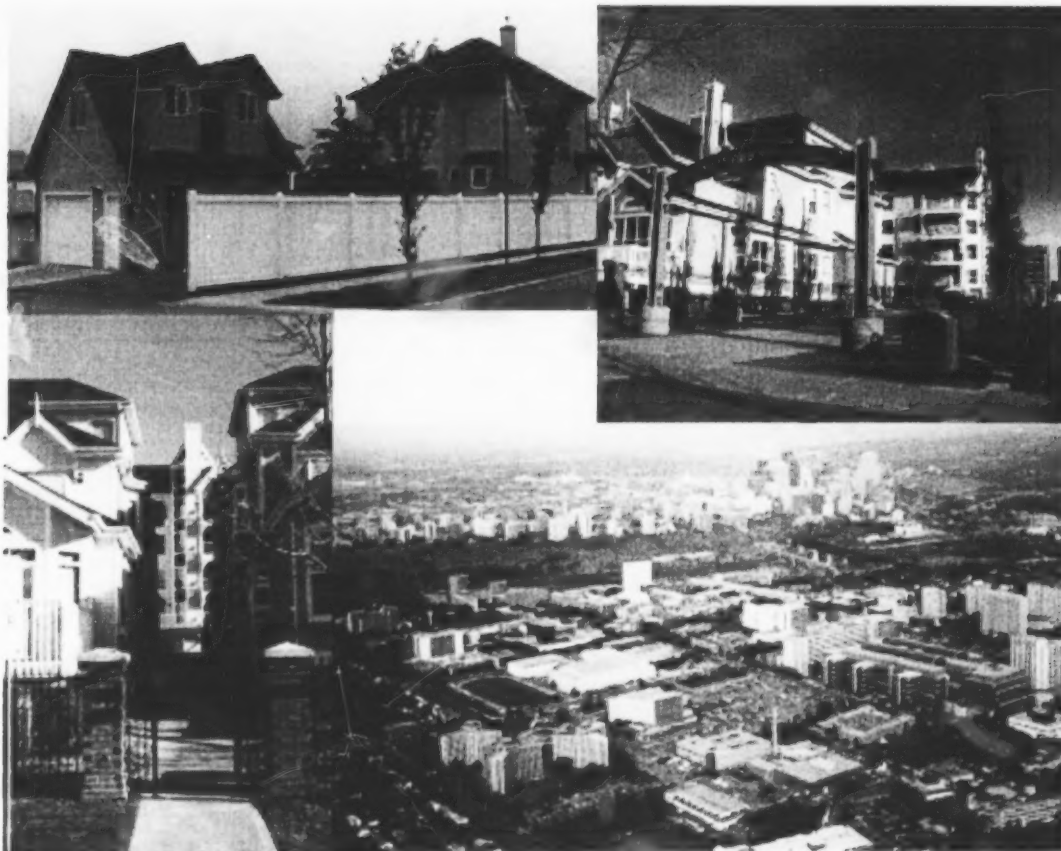
*** Source: Canada Mortgage and Housing Corporation

Note: Certain portions of questionnaire are not easily tabulated and do not appear in Appendix 3



Edmonton's Urban Land Intensification Strategy

Audit Report Three: Focus Groups - Summary Report -



Prepared for:
The City of Edmonton
by Marcomm Works and Research Innovations
September 11, 2001

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- 4. CONCLUSIONS - 4

1. Introduction

On March 20, 2001 Edmonton's City Council directed the administration to develop an Urban Land Intensification Strategy. To assess citizen and stakeholder understanding of land intensification; their perceptions of its advantages and disadvantages; their support for such a strategy; and to gather their input as to strategy elements and guiding principles, Marcomm Works and its partner, Research Innovations, were commissioned by the Planning and Development Department to conduct a program of focus group research.

This report provides a summary of the focus group discussions. Please note that it has been written from the independent and objective point of view of Marcomm Works/Research Innovations. Any opinions, interpretations or conclusions contained within it may or may not coincide with those of the City of Edmonton.

2. Methodology

A total of 98 people attended 10 focused group discussions in 2001, or focus groups, as follows:

1. Corporate representatives group (pre-test) – July 16, Noon
2. Citizens-at-large – July 17, 6 p.m.
3. Citizens-at-large – July 17, 8 p.m.
4. Business organizations – July 18, Noon
5. Developers and developer organizations – July 19, Noon
6. Government and institutional representatives – July 24, Noon
7. Environmental group and association representatives – July 24, 6 p.m.
8. Community league/organization volunteers and members – July 24, 8 p.m.
9. Hard and soft service suppliers – July 25, Noon
10. City of Edmonton Environmental Advisory Committee, Aug. 2, 8 a.m.

In this manner, the research included a wide variety of stakeholder organizations, as well as citizens-at-large from all areas of the city.

All sessions were moderated by either Hank Goertzen, Marcomm's senior consultant for the focus group project, or Coral Thygesen, Research Innovations' senior consultant for the project. Each session lasted just under two hours.

3. Key Findings

3.1 Suggested Guiding Principles

Each session explored the guiding principles that should be followed in the development of an urban land intensification strategy. There were a number of common thoughts in most of the focus group sessions regarding the guiding principles. Those expressed most often included:

- Based on thorough public consultation
- Accompanied by a program of public education to raise citizen awareness of the pros, cons and potential actions
- Based on a long-term vision for Edmonton, including clear goals and objectives for intensification
- Based on consideration for the needs and desires of communities and current residents of those communities (as well

as consideration for the potential impacts on them)

- Ensuring "choice" in intensification alternatives as well as choice in housing for residents
- Protection of existing natural areas, parks, farmland and green spaces
- Designed to accomplish savings in infrastructure costs, maintenance and functionality
- An inter-departmental, inter-governmental, and inter-regional approach – with broad acceptance and cooperation both within the City of Edmonton, and in other levels of government and other communities in the region

3.2 Advantages & Disadvantages of Intensification

Each focus group was asked to brainstorm lists of possible advantages and disadvantages of intensification. Advantages identified most often in the sessions included:

- Potential environmental benefits of reduced automobile usage (and also increased transit usage), leading to better air quality
- Protection of existing parklands, greenspaces and farmland
- Potential social advantages through stronger and more diverse "communities"
- Savings in infrastructure costs and maintenance costs
- Revitalization of downtown and older, more "run-down" areas of the city
- In-filling of vacant lands and buildings
- More "mixed" development, with services and amenities in easy walking distance of residential developments

Disadvantages identified most often included:

- Increased traffic congestion and associated noise/stress/pollution/lack of parking
- Potential for over-crowding
- Possible loss of parklands, natural areas, greenspace and farmlands
- Reduced options for housing
- Strain on infrastructure and other services (i.e. police and fire services could be more difficult to provide in more densely developed areas; increased usage of existing parks and services; etc.)
- Resistance from the public or large segments of the public who want a suburban lifestyle
- Potential for increased crime and pollution generally (i.e. garbage, litter, etc.)

There was significant variance among the focus groups in the strength and commitment with which advantages and disadvantages were presented and argued by participants. The lists of advantages were much longer than disadvantages in the case of business organization representatives and environmental organization representatives. On the other hand, the lists of disadvantages were longer than advantages in the citizens-at-large focus groups, community league volunteers, and the Edmonton corporate representatives group. Developing more balanced lists of positives and negatives to intensification were the government and institution representatives, providers of hard and soft services, developers, and the Edmonton Environmental Advisory Committee members.

These discussions of the advantages and disadvantages of intensification illustrated

that once debate is initiated on an Urban Land Intensification Strategy for Edmonton, environmental organizations (for the environmental benefits) and business organizations (for cost/tax savings and business benefits/opportunities) are likely to be strong supporters of more intensification for Edmonton. Counter-balancing that support to some degree will be wariness on the part of citizens at large as well as some other stakeholder organizations, who will be concerned about potential negatives and possible unilateral action without adequate consideration of citizen concerns. Citizens and stakeholder organizations are likely to see that there are both potential benefits and drawbacks to intensification – with most looking for a balance of future development that would minimize the disadvantages and emphasize the advantages wherever possible.

3.3 Suggested Elements of a Strategy

In discussing what participants' thought a "strategy" would include or might involve, a common thread in all sessions was that it should include a long-term "vision" or some clear long-term intensification "goals and objectives", together with the action plan for achieving the vision. Others believed a strategy would be akin to developing "policy" for the City of Edmonton. Many also believed a strategy should clearly identify the area or areas targeted for intensification and the intensification actions to be undertaken. On several occasions, a suggestion was raised that a strategy should also include a thorough assessment or audit of Edmonton's current situation and its ability to intensify.

Again, because Plan Edmonton already provides a long-term vision for Edmonton as a whole – and because policy already exists

for development in the city – there were some participants in most (but not all) of the sessions who questioned the need for yet "another" strategy or planning document. There also was some skepticism about whether the city would actually follow such a strategy if it was developed at any rate, with a number of participants in several groups (particularly the citizens at large and the community league volunteers session) raising anecdotes about City Council "ignoring" approved plans.

3.4 Potential Areas for Intensification

Many thought that vacant land and buildings, especially land and buildings in or near the core of the city, would be suitable targets for more intensified use. The University Farm, CN/CP railway land, Workers Compensation Board rehab site, and Heritage Mall were frequently mentioned.

There was general agreement that all areas of the city, both residential and commercial, as well as the core and suburban areas, have the potential for more intensified use.

When discussing opportunities in the downtown core and its surrounding areas, many participants felt that if this area was renewed or more intensely developed, then that would make it possible for more people to both live and work in the downtown area. Several thought the demand for quality housing close to the downtown is going to increase, especially among the baby boomers, as they become "empty-nesters". Others felt that potential benefits of inner city intensification include reuse of existing infrastructure and services (e.g. schools), along with improvements in appearance and value. Others pointed out

that it might be very costly to add or replace services in these older communities.

3.5 Potential Intensification Activities

Participants suggested many different intensification activities that could be included as part of a land intensification action strategy. Early actions would include establishing an inventory of potential sites or locations for intensification, as well as a list of what has worked well in other cities. Gaining buy-in from all stakeholders was seen as an essential component. Other suggestions included:

- All new developments in suburban areas should be contiguous with existing development (eliminate leap-frogging).
- Smaller lots should be incorporated into new suburban developments, thereby intensifying land use in newly developed areas.
- Intensification should take place along the LRT route and the LRT should be extended to increase intensification opportunities.
- Allow more intensified use of residential and commercial buildings (e.g., basement suites, granny flats, lofts, underground parking).
- Encourage the development of mixed neighborhoods (e.g., both low and high density housing, mixed demographics) with integrated commercial centres (rather than big box store developments).

3.6 Success Measures

Participants provided many different suggestions on how to measure the "success" of an urban land intensification strategy for Edmonton. The measures of

success that were mentioned most often were:

- We like to live here/are happier/more satisfied
- There is a positive impact on revenues and expenditures (e.g. increase in property taxes with no increase in tax rate)
- There is buy-in and more intensification is happening/less confrontation/ more acceptance
- Better/more use of public transit/LRT
- Less crime/safer
- Downtown is busier/more vibrant
- Natural and agricultural lands and the river valley are preserved
- Improved air quality
- Increased satisfaction with their communities
- Increased population density
- Fewer vacant lots/buildings/parking lots
- Enhanced quality of life
- Less wasted space
- Infrastructure has been maintained/level of reinvestment in older infrastructure
- Easy access to facilities and services/more livable
- Improvements in appearance
- More choice/diversity (e.g., in neighbourhoods, dwelling types, commercial/industrial use)
- More affordable housing

4. Conclusions

- Findings indicate that the term "Urban Land Intensification" does not immediately convey an understanding of its meaning to those unfamiliar with the term or the concept of intensification. As well, several participants considered it a "hard" or "harsh" phrase that can tend

to generate quite negative impressions of its meaning.

- The responses indicate that re-naming the strategy initiative with a term or phrase that captures the idea of "more efficient land use" may not only lead to better initial understanding, but avoid creating immediate negative impressions among many stakeholders and citizens at large.
- The Urban Land Intensification Strategy should set out a long-term vision for Edmonton; include clear goals and objectives; set out city policy; be based on an audit or assessment of the city's current situation; and include an action plan for implementation. Importantly, it also must be seen to be supported by City Council and the city administration and adhered to once adopted.
- The findings on support for the strategy are:
 - There will be strong support for intensification action in Edmonton and the development of the Urban Land Intensification Strategy among environmental groups and organizations (primarily for the environmental benefits), as well as many business organizations and developers (primarily for cost/tax savings and business benefits and opportunities).
 - Community league representatives and citizens at large will be more wary of the potential negative impacts (e.g. traffic congestion, over-crowding, loss of green space, etc.).
 - If no explanatory information is provided to them, some citizens and stakeholders will not believe that an Intensification Strategy is necessary. (e.g. they believe that Edmontonians appreciate the land and space they now have, that Edmonton has done a good job of using its land, that plans are already in place to ensure appropriate land use, that the cost of intensification action will be high).
 - Most citizens and stakeholder organizations will understand that there are both potential benefits and potential drawbacks to intensification. Those who support an intensification strategy are looking for a strategy that helps avoid or minimize potential disadvantages and helps ensure potential advantages or benefits.
 - Gaining buy-in at the strategy-development stage will be an important part of the strategy's success. This will require clearly defining what the strategy is intended to do, explaining the rationale for the strategy, and providing education on the benefits of pursuing such a strategy.



Edmonton's Urban Land Intensification Strategy

Audit Report Four: Assessing Plan Edmonton



January 18, 2002

THE CITY OF
Edmonton

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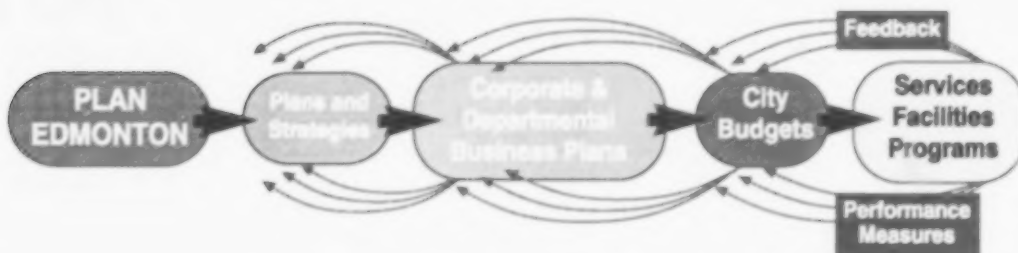
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Introduction

Plan Edmonton is the strategic policy framework that guides a wide range of decisions about Edmonton's physical, economic and social development. Other plans, policies and programs flow from *Plan Edmonton*.



A Guide to Municipal Decision Making



In approving Plan Edmonton, City Council adopted a requirement that the Plan be monitored, using performance measures and other feedback, and updated when necessary to address the evolving priorities of City Council and the citizens of Edmonton.

Since approving Plan Edmonton on August 31, 1998, City Council has reviewed and adopted a number of major plans and policies, including the *Transportation Master Plan*, the *Environmental Strategic Plan*, the *Integrated Services Plan* and the *Strategy for the Conservation of Natural Areas*. Council has also initiated work on issues related to the physical development of Edmonton, including the Urban Land Intensification Strategy.

This report is a review of the *Plan Edmonton* priorities and strategies that provide a basis for policies and action that work towards the intensification of land use in Edmonton. This information will assist Council in determining if the existing provisions of *Plan Edmonton* are sufficient to achieve intensification objectives or if changes to the Plan are required.

Plan Edmonton Review

Plan Edmonton contains the City of Edmonton's Physical Growth Strategy, and statements of the City's physical growth priorities and implementing strategies. To determine *Plan Edmonton's* support and direction for intensification, an interdepartmental team assessed pertinent policies and strategies.

The reviewers found that a number of provisions of *Plan Edmonton* promote and result in intensification of urban land use, but that intensification is not a specific objective of the plan. As well, interpretations of how the *Plan* will affect urban land use intensity differ from one viewpoint to another. Most concerns about the adequacy of the existing policy framework are related to environmental conservation and the capacity of the City and other public organizations to provide infrastructure and services in a timely manner.

The reviewers concluded that focused discussions about urban land intensification are needed to determine the nature of, and the priorities for, specific strategies and targets and the means to achieve them if Council intends to make intensification a specific objective. One approach would be more aggressive application of existing strategies that promote intensification. Another would be to develop a policy framework for an intensification program and add it to *Plan Edmonton* as a new priority.

The fundamental question is "Does *Plan Edmonton*, as it exists, provide a sufficient basis for the development of intensification policies and programs or does the *Plan* need amendment?"

The following is the *Plan Edmonton* Physical Growth Strategy and the priority and strategy statements that address urban land use intensification in a significant way.

Our Physical Growth Strategy

Edmonton is poised for a decade and more of economic and physical growth. By the year 2020, Edmonton will be home to between 800,000 and 900,000 people. Our generalized land development concept is shown on Map 1.

Our physical growth strategy addresses the challenge of accommodating growth and financing new infrastructure and services in developing suburban areas while maintaining the quality and viability of existing developed areas.

We will make the most of what we have already built. Working with citizens and community and business organizations, we will sustain our mature residential neighbourhoods and business areas. We will encourage rehabilitation and renewal through re-investment in public

infrastructure and the application of land use plans and regulations that accommodate sensitive redevelopment.

We will optimize the use of public infrastructure by promoting infill development in existing neighbourhoods and business areas and accommodating higher density land uses along transportation corridors.

We will promote investment in commercial and residential redevelopment in the Downtown and promote the Downtown as the focal point of our City. We will support economic activity in our other existing commercial and industrial areas by continuing to provide needed services and infrastructure. We will accommodate changes in business operations that may be required to meet changing business conditions.

We will promote the development of the existing and potential economic activity centres where locational advantages or existing facilities provide special opportunities for economic development in the knowledge-based economy of the twenty-first century. Designated economic activity centres are shown on Map 2.

To facilitate long-term planning, we have designated enough residential, commercial and industrial land to accommodate projected development in each sector of the city for a minimum of thirty years. The staging of development will be determined by our ability to provide cost-effective municipal infrastructure and services. Our agricultural areas will be protected from premature fragmentation until they are needed for urban development.

We will manage the development of suburban areas to control the life-cycle costs of the public infrastructure and services that our citizens demand. We will encourage the efficient and cost-effective use of land, infrastructure and services by promoting compact and contiguous development.

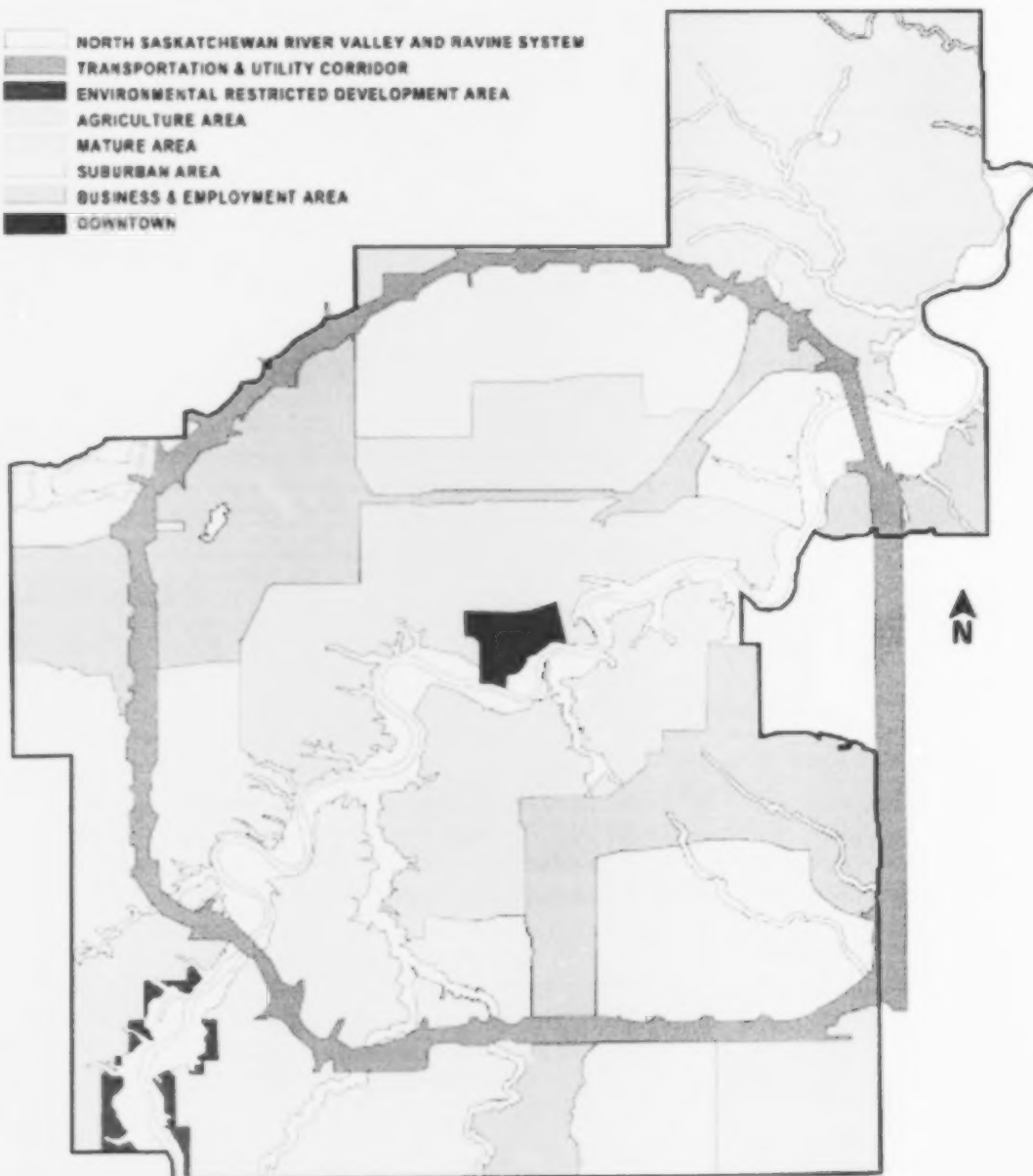
In accommodating and managing growth and facilitating redevelopment, we will promote and apply urban design principles that contribute to the safety, attractiveness and convenience of our communities. Our suburban residential areas will provide for choice of housing style and location and include a mix of single and multiple family housing. Our commercial and industrial areas will provide a variety of environments conducive to the conduct of business activities.

We will ensure that sufficient recreational facilities and open spaces are available and accessible for the enjoyment of our citizens. We will protect the North Saskatchewan River Valley and Ravine System and seek to conserve regional environmentally sensitive areas and natural sites for the benefit of future generations.

**MAP 1
PLAN EDMONTON
LAND DEVELOPMENT CONCEPT**

This map represents a broad and conceptual illustration of the desired land development structure and is not intended to provide site specific direction to land use regulation.

-  NORTH SASKATCHEWAN RIVER VALLEY AND RAVINE SYSTEM
-  TRANSPORTATION & UTILITY CORRIDOR
-  ENVIRONMENTAL RESTRICTED DEVELOPMENT AREA
-  AGRICULTURE AREA
-  MATURE AREA
-  SUBURBAN AREA
-  BUSINESS & EMPLOYMENT AREA
-  DOWNTOWN

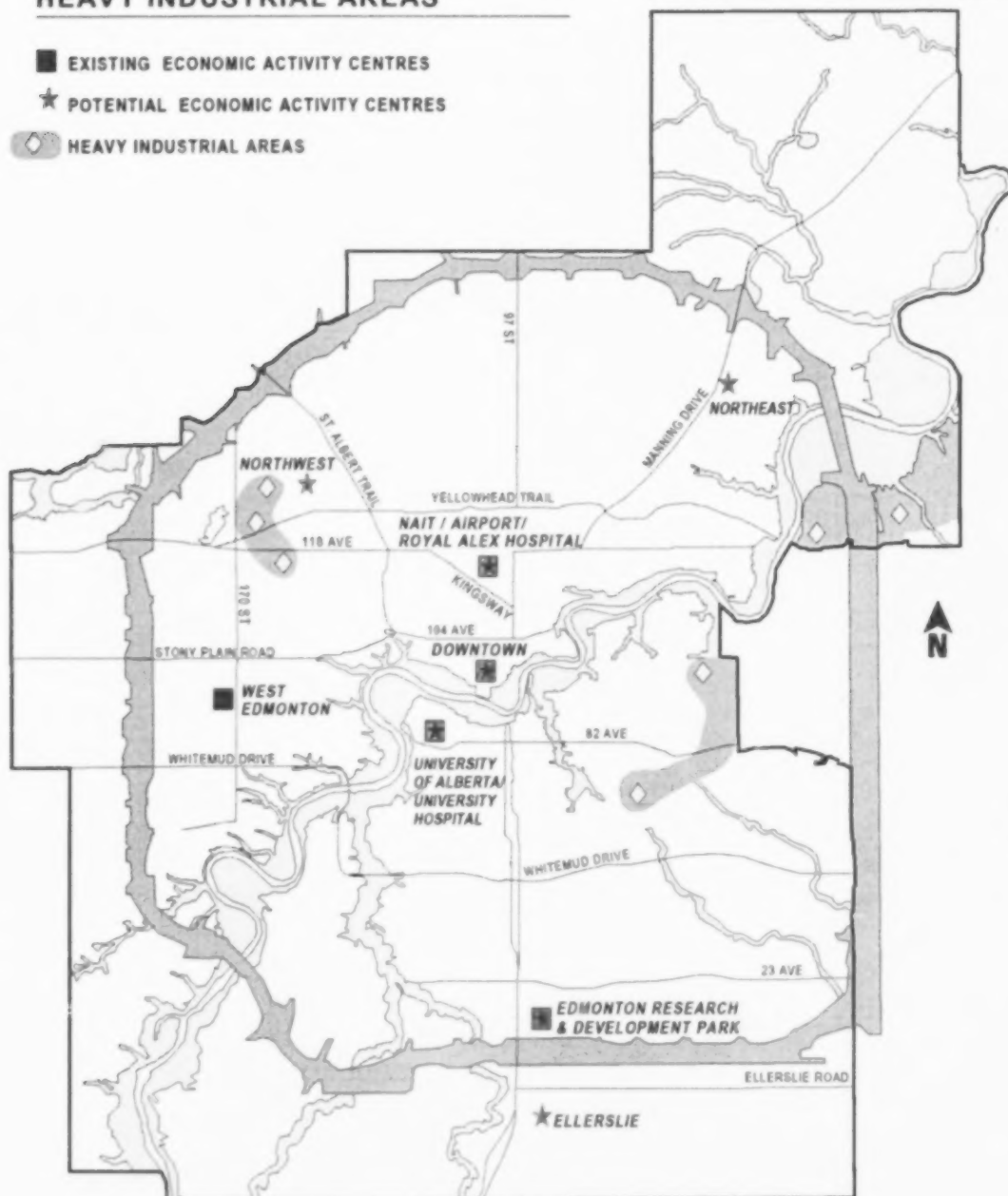


MAP 2

ECONOMIC ACTIVITY CENTRES AND HEAVY INDUSTRIAL AREAS

- EXISTING ECONOMIC ACTIVITY CENTRES
- ★ POTENTIAL ECONOMIC ACTIVITY CENTRES
- ◊ HEAVY INDUSTRIAL AREAS

This map represents a broad and conceptual illustration of the desired land development structure and is not intended to provide site specific direction to land use regulation.



Our Priority: Land Development Philosophy

Develop and utilize a land development philosophy that meets the City's long-term development needs and achieves the optimal balance between residential, industrial, commercial, institutional and recreational land use.

1.1.1 Provide for choices regarding the types of developments in which people want to live and do business.

1.1.12 Place a high priority on the effective and efficient use of land.

1.1.13 Plan for urban development which is environmentally, and fiscally sustainable in the long term, based on the City's financing, infrastructure, and environmental strategies. (Define environmentally and fiscally sustainable; we need to be achieving sustainable improvements in the quality of life for Edmontonians).

Our Priority: Downtown Development

Ensure that downtown Edmonton is vibrant and alive – a magnet for business, commerce and people, with unique and attractive residential districts, and diverse entertainment, recreation and cultural opportunities.

1.2.2 Maintain support for and implement the Downtown Plan.

Our Priority: Utilization of Existing Infrastructure

Encourage maximum development around existing City infrastructure. This will include encouraging the utilization of the existing supply of lands in Area Structure Plans approved for development before undertaking additional expansion; "building out" and servicing all approved neighbourhoods; and supporting strategic growth of the City, rather than "growth for the sake of growth".

- 1.3.3 Support contiguous development that is adjacent to existing development in order to accommodate growth in an orderly and economical fashion.**
- 1.3.4 Promote intensification of development around transportation corridors and employment areas.**
- 1.3.5 Support increased densities of land use through infill development that is sensitive to existing development.**
- 1.3.6 Manage the City-owned land and facility inventory to optimize existing infrastructure.**

Our Priority: Reinvestment in Mature Neighbourhoods

Invest in the redevelopment and revitalization of mature neighbourhoods, including appropriate responses to the evolving needs of residents as community demographics change.

1.5.2 Encourage rehabilitation, redevelopment and infilling to increase the amount and quality of housing in mature neighbourhoods.

1.5.3 Maintain and renew necessary infrastructure in mature neighbourhoods.

1.5.4 Maintain and improve older commercial and industrial areas while mitigating negative impacts on adjacent neighbourhoods.

Our Priority: Managing Suburban Growth

Manage suburban growth in a manner that ensures adequate infrastructure and services and maintains a balance of residential, commercial, industrial and recreational land uses.

1.7.1 Accommodate growth in an orderly, serviced and cost-effective manner.

1.7.2 Provide for a range of housing types and densities in each residential neighbourhood.

Our Priority: Approach to Infrastructure

Develop an accurate picture of the costs associated with various infrastructure development, upgrading, and maintenance options; provide a level of infrastructure that is affordable, safe and sustainable; and employ emerging technologies to reduce costs.

- 4.1.2 Ensure that infrastructure rehabilitation and development programs are adequately funded on an ongoing basis and are as efficient and effective as possible.**

Our Priority: Financing Infrastructure

Develop and maintain a comprehensive, long range financial plan that realistically links all City infrastructure development, upgrading, and maintenance plans to the resources required for successful implementation.

- 4.2.2 Maintain a balance between operating expenditures and operating revenues on a continuing basis.**

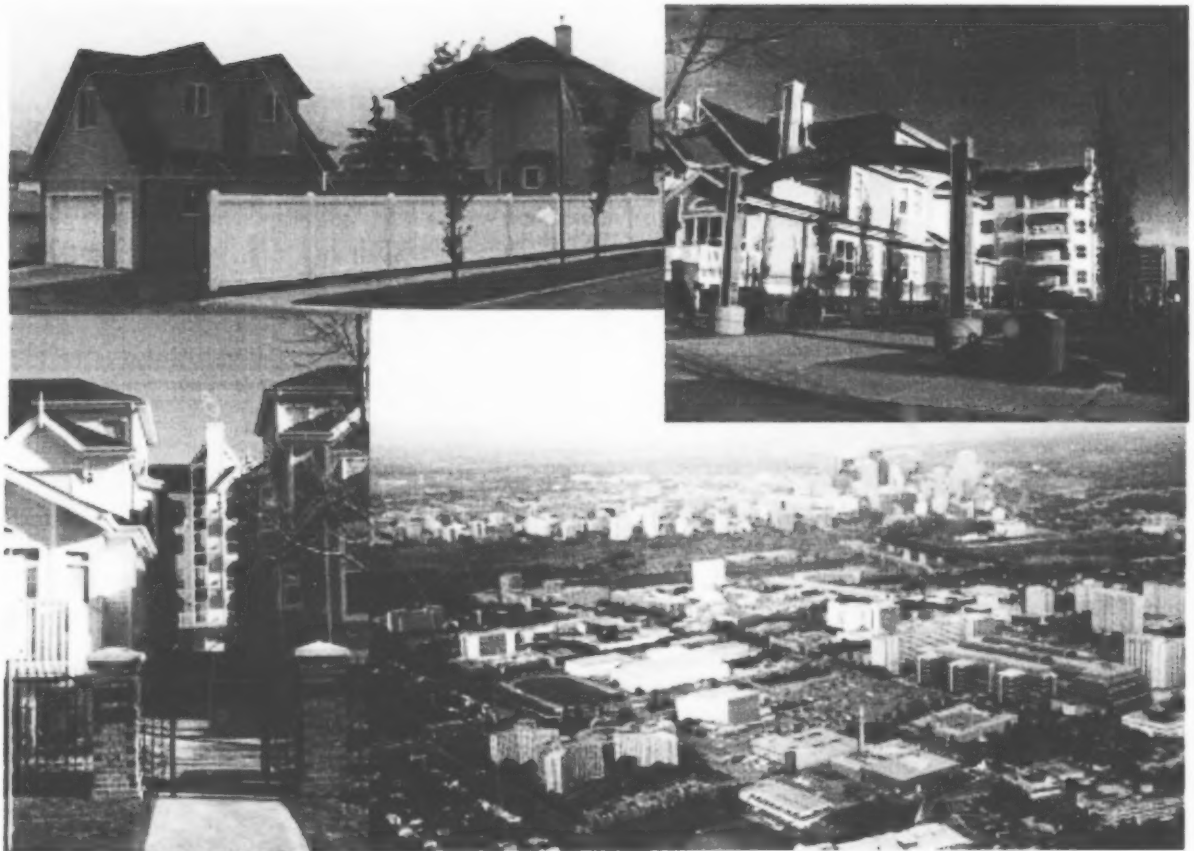
Conclusion

Plan Edmonton is now a three year old document. Have the needs and desires of Edmonton and its citizens changed sufficiently that a re-examination of the Plan's intensification policies is required or do the directions and intentions stated in the Plan still hold? Understanding the role Plan Edmonton will play in directing Edmonton's approach to intensification is crucial to moving forward successfully.



Edmonton's Urban Land Intensification Strategy

Audit Report Five: Urban Planning Approaches



Prepared For:
The City of Edmonton
by The Dagny Partnership
November 22, 2001

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Introduction

The prosperity of the 90's and the increase in urbanization in North America and around the world has fueled new challenges for municipal politicians, urban planners, community advocates and the development industry. Managing growth effectively has become a defining challenge facing many communities.

Communities have found that the cost of managing growing municipalities is far outstretching the property tax base that traditionally supports service demands.

The consequence of significant urban expansion, additional costs and the traffic associated with massive suburban development has created an urgency that is not usually associated with land use planning. Cities around the world are experiencing varying consequences of growth and are taking individual action to initiate responses.

Cities such as **Atlanta** saw federal funding drop because of excess air pollution from traffic. States, such as **Maryland**, saw valuable and scarce farmland being developed impacting both the watershed and economic base. Health professionals started to see the correlation between the sedentary-car driven lifestyle and growing levels of obesity and related afflictions. As old industries die or older retail malls fade from popularity, their abandoned sites have become a black eye in the community and a burden on the tax base of the remaining business and residents.

**Review's
Purpose**

Within this paper we will highlight how some communities have tackled their urban intensification issues. We will summarize the key concepts and tools that have been utilized to move theory into reality.

This review is designed to offer Edmonton's community stakeholders a snapshot of the planning principles, tools and tactics that other communities have utilized. Many of these initiatives are relatively current and therefore the measures of success may be limited. However, regardless of the success or failure of specific tactics in specific communities, there are valuable lessons to be learned for Edmonton.

The first important lesson learned from other communities is that there is no cookie cutter solution to urban planning; therefore this summary should be used as a catalyst for discussion rather than a workbook for solutions.

"For the first time, there is broad, though far from universal, recognition that the problems of our cities and suburbs need to be addressed and that the planning and design of our cities have ramifications in every aspect of public and private life."

Shelley Poticha,
Executive Director
Congress for the New
Urbanism

**Hot Trends in
Urban Planning**

Emerging from the consequences facing municipalities and regions, two major planning movements have evolved under the terms, **smart growth** and **new urbanism**. These movements provide principles and a framework for developing community-customized solutions that help municipalities envision, articulate and create vibrant sustainable communities. While these approaches came from different roots and may have different priorities both provide strategies, tools and tactics to reach the same goal – more livable communities.

**Understanding
Smart Growth**

The concept of "smart growth" emerged in the US through the 1990s. Urban regions needed a new approach to effectively manage growing population demands, urban lifestyle pressures, escalating transportation needs and critical health and environmental requirements. The interest in this approach has extended to large and small communities across the US, Canada and around the world.

"Smart Growth" recognizes that growth will occur. It is not an anti-growth movement. A "Smart Growth" approach proactively guides the direction and nature of strategic urban development and conservation within a community.

"Smart Growth" was coined as an umbrella concept that brings divergent and often conflicting interests to the table to find a middle ground that would create better more livable communities. These groups include:

- { anti or slow growth advocates and environmentalists
- { pro-growth advocates including the development industry
- { inner-city advocates
- { reasonable or less-impact growth advocates

In the US a Smart Growth Network has grown to include the Urban Land Institute, Congress for the New Urbanism (CNO), International City/County Management Association and the American Farmland Trust. While each of these organizations has a different reason for being at the table, they have come to understand the need to manage growth differently.

It is important when examining the American smart growth strategies, to understand that the contexts are quite different. In the US, cities are interdependent and autonomous entities that enjoy home rule privileges and are empowered with a broad range of tools to finance and guide investment. In many cases, state governments have championed smart growth initiatives because towns and cities have not been able to manage growth in a coordinated fashion. Finally, the levels of senior government public investment related to smart growth are staggering in the American context.

**Understanding
Smart Growth**

(continued)

For example, the US federal program supporting transit and other balanced transportation efforts, the Transportation and Equity Act for the 21st century (TEA-21) is a \$217 billion program. It is estimated that if the Greater Toronto Area were an American municipality, it would be eligible for \$240 million annually in federal government grants. While there are lessons to be learned from the smart growth campaign in the US, the applicability and relevance in Canada must be considered.

"Smart Growth" initiatives focus on finding community-unique solutions using a combination of the following principles:

- { To foster a *stronger sense of community* through attractive design and human scale development.
- { To promote compact *mixed-use development* that creates more integrated neighbourhoods and communities.
- { To maximize the *existing urban land footprint* by re-developing inner-core areas, renovating existing infrastructure and re-using existing buildings.
- { To *diversify the housing opportunities* within neighbourhoods to encourage a mixture of household types, family size and income.
- { To offer a *full range of transportation infrastructure* to support walking, biking, bus or rail transit and driving.
- { To *preserve the natural, cultural and historical areas* including open space and farmland.
- { To *remove barriers* to urban design innovation including ensuring the development process is fair, predictable and cost effective.

A "Smart Growth" process encourages all stakeholders to actively participate in the process of defining their community. The most successful initiatives deliver balanced solutions that ensure all parties share in both the risk and rewards resulting from the project. In other words no one vested interest drives the process or is driven by it.

The concept has gained political support because more and more communities are implementing projects that demonstrate that they can achieve benefits for local neighbourhoods, reasonable business opportunity for the private sector, less impact on municipal servicing costs and a more stable long-term municipal tax base.

***"Smart growth
should not mean
the same thing
everywhere.
What is "smart"
in New York City
may be "dumb"
in Phoenix."***

*Anthony Downs,
Planning Magazine*

Smart Growth

(continued)

"Smart Growth"
Tool Box

Growth management and "Smart Growth" may not be synonymous however they are complimentary. The "Smart Growth" toolbox offers municipalities a wide array of incentive and policy-based approaches to curb the most common growth management challenge - urban sprawl.

**Urban Growth
Boundaries**

For nearly three decades **Oregon** has been on the forefront of managing growth and striving to tackle urban sprawl. With the implementation of the 1973 State Land Use Act, municipalities were required to implement an urban growth boundary. Within a defined urban growth boundary municipalities were required to ensure a 20-year supply of land for urban development. Growth boundaries are chosen to ensure the protection of agricultural lands and sensitive environmental or watershed areas around urban municipalities such as **Portland**. Growth boundaries often are used to define service limits, infrastructure support and the level of density required for effective residential or commercial development. An urban growth boundary offers a macro tool to limit urban sprawl but used in isolation will have limited results.

**Infill Incentives
and Assistance**

Strategically targeting development in the urban core provides growth opportunities without the side effect of sprawl. Many communities from **Tulsa** to **Calgary** are targeting infill strategies to re-vitalize aging neighbourhoods. To support these objectives municipalities have added other "Smart" planning tools including streamlining building codes for renovation projects, density considerations or community consultation assistance to work through the inevitable "Not in my back yard" (NIMBY). Other communities direct public infrastructure investment in amenities such as the River Walk in **Milwaukee**, or the Metrotown Library in **Burnaby** to enhance their communities competitive appeal.

**From Greyfield to
Town Square**

Regions such as **Winter Park, Florida** or **Brainard, Tennessee**, have focused on grayfield or shopping center re-development. These initiatives convert asphalt wastelands and aging strip malls into rejuvenated town squares creating a focal point to the community and a rejuvenated retail tax base.

**Capitalizing on
Transportation
Infrastructure**

Some initiatives direct growth to targeted areas. One very popular rationale for targeting certain zones for new development is to capitalize on the exiting public transportation investment reducing traffic congestion. Southern Bell's consolidation of employees into three new business centers linked to public transit in **Atlanta** improved Southern Bell's efficiency, increased transit's usage and viability and is currently acting as a catalyst for incremental development near these new Southern Bell centers.

*"In existing
neighbourhoods
with a number of
vacant,
developable lots,
new infill-
housing
construction has
stimulated the
market and
improved
surrounding
property values."*

Mayor Susan Savage,
The Next Frontier

Smart Growth
(continued)

**Zoning – A Core
"Smart Growth"
Tool**

Innovative use of the zoning is a common theme in "Smart Growth" projects. The creation of mixed use areas in **Toronto** opens opportunities for residential development in underutilized plaza sites and commercial avenues. Other communities such as **Cobourg** have implemented special zoning for heritage preservation or special set backs for environmental buffers such as **Oregon** has done in the **Willamette River Greenway** and **Edmonton** does with environmental reserves.

Other zoning initiatives provide density benefits or financial incentives for the development of mixed income neighbourhoods that include modest and low-income housing.

**From Brownfield
to Renewedfield**

Aging industries provide both challenge and opportunity to "Smart Growth" communities. Brownfield site reclamation and re-development has turned environmental wastelands into healthy, viable and profitable neighbourhoods.

In the past the private sector has shied away from these projects because they are seemingly fraught with risk. However as communities start to embrace a "smart growth" approach they have worked together to break down the re-development barriers. Some communities use density bonuses to offset financial risks. Some states or municipalities have covered the cost of environmental clean up, while others have provided liability protection for actions of previous landowners. The result is new opportunities to accommodate urban growth without encroaching on currently undeveloped land. A few examples include:

- { **False Creek in Vancouver** created a mixed use residential and tourist attraction from an aging light manufacturing area.
- { **Pittsburgh's** current reclamation project is designed to convert acres of industrial slag into a riverside residential neighbourhood of 700 residential units.
- { **Dallas** converted old stockyards and industrial sites into a new arena, convention complex and downtown residential neighbourhood.

**Financial
Incentives
Become
Community
Investments**

To direct the location and type of growth many communities use some form of financial incentive. **Cleveland** provides tax abatement or tax holiday programs to encourage development in the downtown core, whereas **Maryland** targets homebuyers with their "Live Where You Work" cash incentives program and they target small business with income tax credits for targeted business re-location. **Winnipeg's Home Renovation Program** provides grants and incremental tax relief for 3 years to upgrade older homes ensuring longer-term viability of inner city housing.

**"The most
challenging
aspects of this
site, (Pittsburgh)
were to create
value where none
existed..."**

Jack La Quatra,
Principal LaQuatra
Bonci Associates

Smart Growth

(continued)

Austin offers a continuum of financial incentives to developers from partial waiving of development fees to covering utility and infrastructure costs. The amount of support is calculated based on the how the development measures up to 100 different criteria defined in their Traditional Neighbourhood District Ordinance.

Punitive Measures Discourage Traditional Growth Patterns

While most communities have achieved more "Smart Growth" success with voluntary incentives, there are also punitive tools in the "Smart Growth" toolbox. Examples include **Pittsburgh's** split tax approach which taxes the building at a lower rate than the land, to discourage land being left undeveloped, or Lancaster and **Calgary's** transportation levy to cover the cost of new road construction. Environmental advocates such as the Sierra Club support imposing an impact tax designed to recover the full cost of the municipal services to new suburban lots.

Most of the "Smart Growth" planning tools highlighted help communities target and direct growth rather than limit it, however, a few "Smart Growth" communities have a vision that does limit growth. **Boulder** targets 2% population growth and manages this strategic direction by limiting the number of building permits issued. **Buckingham Township, Pennsylvania** limits suburban development by limiting new school construction, therefore reducing the appeal of new suburban areas to young families.

Strategic Property Acquisition

Balancing urban growth pressures and quality of life expectations is a tough challenge. As we better understand the impacts of urban, residential and industrial development we also understand the need to manage our "impact" on our environment. The "Smart Growth" toolbox includes a series of tools to protect key environmental areas or preserve agricultural lands from development. These include dedicated funding programs such as **Maryland's** Rural Legacy Program or **Waterloo's** Environmental Land Acquisition Program, purchase or transfer of development rights between rural and urban areas as used in **Boulder** or legislated set backs as used on key waterways in **Oregon**.

The "Smart Growth" approach looks to customized solutions that will create more "livable" communities for generations of urban residents.

"Generally, smart growth refers to land use planning and development practices that enhance the quality of life in communities while preserving ecological integrity."

Greg Cardwell,
"Smart Growth:
Coming to a
Community Near You

New Urbanism – Back to the Future – New Urbanism evolved from a small group of architects, planners and developers that began reviving traditional design and development patterns for municipalities. By 1993 this group formed The Congress for the New Urbanism (CNU) to champion their ideas. This organization has grown to include over 2,000 members from the design, development, environmental, academic and political communities throughout North America.

By 1995 the CNU had formulated a Charter of the New Urbanism that articulates strategies to encompass the movement. These strategies are designed to improve the quality of life of our cities by improving our neighbourhoods. Key goals of New Urbanism include the following:

- { To foster healthy, vibrant towns and cities.
- { To ensure a diverse choice of life style options.
- { To enhance the quality of the natural and built up environment.

Where **"Smart Growth"** focuses on macro growth management issues, **New Urbanism directs its energy into design and implementation approaches** that create an urban environment where people feel connected – with each other, with amenities, with businesses and with the heritage that defines their community.

The CNU solutions may appear similar to neighbourhoods of the past. Streets and amenities are planned to encourage more walking and interaction with others in the community. They encourage opportunities to enjoy the natural surroundings or appreciate the built heritage that defines a city. New Urbanism neighbourhoods are designed with a people focus, which was more the case before the automobile drove urban design.

A checklist for New Urbanism neighbourhoods would include some of the following:

- { Housing choices targeted at different incomes, family needs, size and density.
- { Shops and amenities within walking distance.
- { Quality transportation options for those that don't drive.
- { Public spaces that provide a community focal point.
- { Respect for the natural environment and the built heritage that often defines the roots of a community.

While New Urbanism neighbourhoods may feel 'more traditional', designers recognize that residents expect a full range of modern amenities. The urban design approach integrates modern urban expectations in a more environmentally sensitive manner

Pulte Homes – the nation's (US) largest homebuilder-has reported that more than 65% of people in South Florida actively shopping for a new home preferred communities designed around New Urbanist principles to conventional sprawl.

Smart Solutions to Sprawl, Congress for the New Urbanism

New Urbanism – It offers diversity and visual stimulation that contributes to creating a healthy, vibrant neighbourhood that people really like to live in.
Back to the Future (continued)

New Urbanism sees the urban municipal region as the economic engine that drives the contemporary world. Advocates view effective regions being made up of effective cities or towns which are in turn made up of vibrant, sustainable neighbourhoods. Therefore, the New Urbanism approach integrates community and economic development policies with design and development strategies.

A key ingredient to success is to understand the parts of neighbourhoods and how they link together to create a vibrant patchwork of interconnected communities call a city.

**Defining
Neighbourhoods**

A concept called *the Transect* was developed by Duany Plater-Zyberk & Company. The Transect is a system of categories that define elements of our built up environment on a scale from urban to rural. The system divides the community into the following 5 primary tiers:

- { Core – most urban
- { Town Center
- { General
- { Edge – suburban
- { Rural

Each tier has defined elements, zoning, land use, design considerations and transportation linkages. Duany feels the benefit to the Transect system is that it is intuitive by description and easy for laypeople to understand. It helps to create an urban planning environment that fosters an integrated approach between land use areas. It strives to create something better than the sum of each of its neighbourhood parts.

Stuart, Florida using a variation on this approach has broken its neighbourhoods down into the following 4 categories:

- { Neighbourhood edge
- { Neighbourhood center
- { Neighbourhood interior streets
- { Commerce and the traditional neighbourhood

An even simpler definition of American cities categorizes them in three concentric rings with defined growth management objectives. The **center core** of a city which is usually the downtown or traditional commercial center; the **inner ring** which represents the first phase of residential development and the **outer ring** which is usually suburban neighbourhoods.

"The challenge is to sustain growth in the first tier, promote it in the second and guide it in the third."

William H. Hudnutt III,
Holder of ULF/Joseph
C. Canizaro Chair for
Public Policy
Urban Land
August 1999

New Urbanism – "Smart Growth" and New Urbanism advocates using this
Back to the approach would strive to sustain or return development in the
Future (continued) core, promote development in the inner ring and guide or
manage development in suburbia.

Regardless of the tool or matrix used to define urban areas, New Urbanism strives to understand the dynamics of neighbourhoods and to create design solutions that optimizes community connections and minimizes negative impact between different land uses.

When an interior residential street evolves into a commercial area with the corresponding traffic you get a NIMBY reaction from residents. When a community is built with no core or center residents feel a lack of focus. When neighbourhoods stretch endlessly with out a defined edge there is very little "sense of community" that is important in New Urbanism.

New Urbanism offers solutions that avoid these planning problems. The movement stresses solutions that create streets and neighbourhoods that are seen as more comfortable, safer and less stressful places to live. The movement tends to look to smaller developments rather than massive ones. Where "Smart Growth" principles are designed to limit sprawl, New Urbanism offers viable urban alternatives to absorb growth within the existing urban infrastructure framework.

***"... if smart
growth really
gets going, then
(the New
Urbanism is)
really the
architecture of
choice for that
development."***

Robert Lang,
Common Ground
Magazine
Nov/Dec 1999

**Communities –
An Integrated
Puzzle**

Communities are like a jig saw puzzle. They are made up of many different components that need to fit together effectively for the community to work. While the priorities and emphasis of these components will differ between communities, effective urban planning ensures that the 4 core areas of transportation, economic development, urban design and community development, health and safety are effectively integrated into the planning. No one component or neighbourhood or city operates in isolation to its neighbours. What for some is viewed as a benefit for others may be seen as a detriment. The challenge is to understand what is the best fit for each piece of the community puzzle.

Several lessons consistently emerged from the literature review that addresses how to achieve balanced solutions from the integrated interests that make up our communities.

**Proactively
Manage Change**

Inevitably this requires change and the change process needs to be proactively managed. It doesn't happen on its own. While some in the community will always embrace change others will resist it. Many worthwhile initiatives have been shelved because of an unexpected NIMBY (Not In My Back Yard) reaction that can galvanize opposition.

**Defining Roles &
Responsibilities
Key First Step**

Defining the roles and responsibilities – by theme, interest or jurisdiction – of the various decision-makers, levels of government and influencers in the community is an important first step. As communities tackle urban planning issues it is important to have all the key stakeholders at the table and to clearly understand what each party can and will undertake.

Secondly it is important to ensure that each partner has the resources, skills and capacity to implement their responsibilities.

There is no point fostering "smart growth" initiatives at the local level if another level of government can over turn it as **London, Ontario** found out with their growth boundary. Initiatives are wasted when one city attempts them as **Boulder** did, only to drive development to neighbouring communities who weren't concerned about sprawl. All jurisdictions need to participate.

**Community
Consultation
Leads to
Understanding**

Case after case demonstrates community and stakeholder involvement is key to success. A constructive community dialogue facilitates a better understanding of the issues and opportunities between all the stakeholders and decision-makers. It leads to a more collaborative integrated approach to solutions.

"To be "smart", a program must look at the big picture – how a community functions and what makes development occur. It also must recognize that housing and job markets, transportation systems, and environmental impacts are regional issues."

Amelia Lorenz
Community
Development
Specialist
Pinole, California

**Communities –
An Integrated
Puzzle**

(continued)

While it doesn't guarantee agreement by all the participants as Southern Bell discovered in **Atlanta** when they started the planning on their corporate relocation to the urban core, an integrated approach usually produces solutions that more of the community can support therefore allowing the initiative to move forward.

Stakeholder involvement doesn't mean decision-making by consensus. However communities from **Sacramento** to **Chattanooga** have demonstrated that growth management strategies are more effectively implemented when all the key stakeholders help define the vision and contribute input to establishing the priorities.

Community involvement takes time and energy however; the process leads to building a strong base of community support that can be critical to implement change.

**Multi-level
Strategy Needed**

Responding to the inter-related pressures in a community requires a multi-level comprehensive strategy including legislation, urban development tools, transportation options, economic development policies, incentives and in some cases penalties.

There is no one tool or one approach that has worked anywhere. Even the grand daddy of urban growth planning, **Portland**, has discovered that the use of the urban growth boundary on its own does not work as effectively as customizing multi-layered solutions to the specific objectives.

The size of the community doesn't change this. Small communities such as **Cobourg, Ontario** has found that they needed a combination of approaches to facilitate change. For example over 10 years Cobourg implemented a New Urbanist policy framework for new developments, downtown re-investment tax incentives, brownfield site redevelopment support, transit supported density zoning, civic infrastructure such as bike ways, virtual site plan approval programs and heritage conservation grants.

**Political Will
Needed to Stay
the Course**

Lastly, whether community support contributes to political leadership or vice versa, both are consistently noted as being a key ingredient to affect change.

With leadership comes political will and political staying power. Urban growth issues are not tackled over night. Even communities in crisis, facing financial penalties, urban gridlock and dreadful air quality such as **Atlanta**, could not shift attitudes that were created over decades in a few months.

"If indeed collectively orientated values still define Canadian urban dwellers, there is a need to reinvent and strengthen the institutions charged with their stewardship"

Tamin Raad and
Jeff Kenworthy
Alternate Journal
Winter 1998

**Communities –
An Integrated
Puzzle**

(continued)

These are ultimately political decisions; often taken at the local government level but influenced by senior levels of government policy or fiscal decisions. Without the political will, from all levels, supporting a consistent direction over the long term, communities have found it is very difficult to strike a sensible balance between unplanned, haphazard growth in some areas and no growth or urban decline in others. Ultimately taxpayers pay more in servicing, policing, transit and other urban infrastructure costs.

**Costs or
Investment –
Who Pays and
Who Benefits**

The age-old question of who pays and who benefits continues to consume the municipal development industry. When it is all stripped down the answer is simple – **the consumer pays**.

The only debate is which consumer pays for what share of the costs.

Financial decisions made by both the public and private sector are based on a risk and reward analysis. The factors that influence the two sides of the decision may be different but they are always weighed and evaluated. It is the debate around where the line is drawn between collective community investments and personal costs that underpins a lot of the dialogue. The following summarizes the general approach to funding found in North America.

**Directed from
Senior Levels of
Government**

Program Types: Programs that contribute to the overall health, safety and prosperity of the region. The projects are seen to benefit a wide range of taxpayer and business interests.

Catalyst for Participation: Declining revenues or lost opportunity for appropriate economic development, increased costs from environmental degradation or quality of life, health and safety pressures from taxpayers.

Contribution: Most of the programs provide a significant portion of the funding required and are tied to specific outcomes (transportation, infill development, conservation, environmental clean-up). In addition many senior levels of government provide specialized expertise to support the projects.

Source of Funding: Most programs ultimately come from income tax either through grants, tax incentives or tax holidays. Some specific taxes or levies may be designated as a source (transportation, sales, environmental).

Risk and Reward: Both the risk and reward is shared by the wider community.

***"I am determined
to see our
children inherit
cities,
communities,
neighbourhoods
– an entire
province – that is
as efficient, that
is as strong as
possible and that
has a quality of
life second to
none"***

Mike Harris,
Ontario Premier
Government of
Ontario Web Site

Costs or Investment

(continued)

Directed from Local Government

Program Types: Programs that strategically target areas in a city or region that are creating an extraordinary burden on the municipal tax base or that offer services that will enhance the quality of life for zones of a city. Programs may include injection of new amenities, streetscape improvements, infrastructure enhancement, parks, local transportation etc.

Catalyst for Participation: Declining property taxes, lost opportunity for appropriate economic development, increased municipal servicing cost or quality of life, health and safety pressures from taxpayers.

Contribution: Municipalities provide funding, technical expertise, community development expertise and local leadership. Often the municipal contribution is the lever to access senior level of government funds.

Source of Funding: Most programs are funded through existing property taxes or by deferring incremental tax revenue through density bonusing, tax incentives or tax holidays. Many municipalities impose user fees that are targeted to specific consumers (development, local improvement, business revitalization, transportation, recreation, utility etc.), however in most cases these are passed on to the end user by the developer or the service provider.

Risk and Reward: The financial risk is primarily spread over local property tax payers and the development industry. The reward is shared by residents (taxpayers and non taxpayers) and the broader business base in the community and region.

Programs that Benefit Individual Business and Consumers

The debate becomes more contentious when a community decides to extend incentives or tax benefits to individual businesses or residents. The challenge for public sector leaders is to ensure that there is wide enough benefit to the community or region to support public sector contributions.

Program Examples:

Guelph's Downtown Tax Incentive Program

Edmonton's Downtown Housing Reinvestment Grant Program

London's Special Property Tax for Heritage Buildings

Winnipeg's Home Renovation Tax Assistance

Programs for pre-1974 properties valued at less than \$90,000

Maryland's Live by your Work Grant Program and the Job Creation Tax Credit Program for Small Business relocation.

Cleveland and Pittsburgh's Density Bonus for Brownfield development.

Portland's Transit zone density bonusing.

**Costs or
Investment**
(continued)**Examples** (continued)

California's land stewardship program offers landowners regulatory relief with implementation of stewardship programs.

Maine's Costal Enterprise Corporation investing in local businesses to improve resource management practices.

Catalyst for Participation: Capitalizes on community interest in a specific project or area by decreasing the risk of individual's investment.

Contribution: Most of the programs provide a small portion of the funding required and are tied to specific outcomes (transportation, infill development, conservation, environmental clean-up). Many of the programs require the actions to be completed prior to any funding being forwarded.

Source of Funding: In addition to the sources noted from the local and senior levels of government, specific types of projects have garnered philanthropy contributions, especially in the arts, heritage, social housing and environmental areas.

Risk and Reward: The tax base shares a small amount of risk, however the business or individual assumes the bulk of it. The reward is primarily seen as the accruing to the individual or business, however, when there is an accumulation of projects such as in a downtown re-vitalization initiative the overall community starts to benefit from the ripple effect of these projects.

As stated earlier, there is no magic as to who pays because the consumer ultimately does. Many businesses simply pass on their costs to the consumer.

Only when there is a risk that the product will not be marketable or profitable, will businesses complain or avoid developing these opportunities.

All these programs are put in place to help motivate desired activities. The greater the public needs usually the greater the public involvement.

In many cases the cost to manage growing municipalities is far outstretching the property tax base that traditionally supports these service demands. The growing gap between servicing costs and the ability of the property tax base to cover these costs, challenges municipal jurisdictions around the continent. As referenced later in the Leadership section some municipal leaders see this as a defining issue that needs to be re-visited to effectively manage urban growth in the 21 century.

"We must work together to make decisions that are right for today — and for tomorrow. We must find ways to forge alliances among everyone with a stake in the land. And we must have every level of government and the law firmly in support of the process and the results."

Terry Kauffman
Lancaster County
Commissioner

Leadership is a Key to Success

The review shows that a variety of leadership models have been employed to facilitate change. The key is that there needs to be leadership from some source in the community. Leaders need to have both the confidence of the community and the resources to affect change. Four key leadership models appear to be the most commonly used.

Senior Level of Government Leads through Legislation and Funding

Several examples of senior government leadership have been reviewed. The earliest example occurred in **Oregon** with the establishment of the state Land Use Act in 1973. Through a legislative framework the State defined statewide planning goals to contain the urban encroachment on agricultural and forestry lands. Oregon required all municipalities and regions to complete a comprehensive plan that would define an urban growth boundary encompassing a 20 year supply of land.

This state direction led to the establishment of **Portland's** Metropolitan Service District (Metro) which voters granted a home-rule charter in 1992. This charter empowers Metro to draft policies covering densities, floodplain protection and transportation standards for 3 counties and 24 cities in the Portland area.

The **State of Maryland** also led a change movement both through legislation and *visible personal leadership* by the Governor. Under Governor Glendening's stewardship, Maryland has implemented a coordinated approach to policy, funding and state legislation to encourage "Smart Growth". Recently the Governor has taken the personal leadership on this issue to the next stage by the establishment of the Governor's *Office on Smart Growth* to champion initiatives and assist communities to find more innovative solutions.

Maryland's program started with the adoption of The Smart Growth Act, to encourage a new approach to urban development. However, Maryland's legislative approach relies primarily on *financial incentives and directing State funding priorities* to motivate change. The Act creates '*priority funding zones*' that qualify for state funding when "Smart Growth" initiatives are implemented within these zones. Zones vary in size but can include whole cities such as **Baltimore**.

The State 'walks the talk' of "Smart Growth" by *strategically siting state funded building in key priority zones* such as the new district courthouse in **Hagerstown** or requiring the University of Maryland to expand in priority funding areas only.

The shifting of annual state funding priorities is used to support their strategic "Smart Growth" direction. Between 1994 and 1997 State funding for *school reconstruction has shifted from 43% to 82% of the school construction budget*.

"The 21st Century Environment Commission's recommendations and the governor's recent funding and policy initiatives provide an opportunity to address these issues in a significant way."

Caren E. Glotfelty,
Vice Chair,
10,000 Friends of
Pennsylvania
Goddard Professor of
Forestry in the School
of Forest Resources

Leadership
(continued)

The emphasis and resources going into renovation encourages re-vitalization of older inner-city communities.

To ensure a sustainable agriculture industry they have developed the Rural Legacy Program designed to pay for the protection of 250,000 acres of agricultural land over the next 15 years.

Maryland has used its legislative clout to streamline the building process. The state legislature has passed a bill to require all counties to adopt a revised building rehabilitation code. This new building code streamlines the sometimes confusing or contradictory renovation regulations that inhibits developers from implementing infill and building renovation projects.

Provincial governments are also starting to pick up the "Smart Growth" mantra. Over the last year **Ontario** has launched a "made in Ontario Smart Growth" program. The program is a multi-faceted approach designed to use legislation and financial incentives to encourage change. It includes public consultation and education initiatives, review of provincial planning legislation, introduction of brownfield legislation, directing \$500 million of the SuperBuild Millennium Partnerships fund to selected "Smart Growth" transportation and environmental programs and the development of an Ontario 400-series Highways Task Force to review highway expansion and the potential introduction of dedicated lanes for car pools and commuter buses.

**Local Leadership
Challenges the
Status Quo**

The catalyst for change may come from a desire to tap into new state funding as in **Baltimore**, or the need to hang on to existing infrastructure funding such as **Atlanta**, or may emerge because of visionary leadership at the regional or local level.

Mayor Brent Cole of **Boise** demonstrates this spirit with the Treasure Valley Institute initiative. This project recognized the importance of regional perspective and created a partnership agreement between 6 cities and 2 counties in their region towards "Smart Growth" initiatives.

Mayor Tom Murphy's vision of turning 238 acres of slag at Frick Park (a brownfield site) in **Pittsburgh** into a viable new neighbourhood took more than money. It took both the vision of what might be, the tenacity to bring diverse interests to the table, the public structure to commit resources, the recognition of the public benefit and the willingness to break down the development barriers.

"Murray Rust and I decided to go after Summerset at Frick Park (Pittsburgh) in part because of the mayor's energy and leadership in trying to make the city more competitive in the housing market. He really worked to eliminate barriers for the private sector."

Mark Schneider,
President, The
Rubinoff Company
The Next Frontier

Leadership

(continued)

Recently **Ottawa's** Mayor Bob Chiarelli, has challenged his community to re-think its approach to planning. The recent Smart Growth Summit led by the Mayor, brought together an eccentric mix of community, business, design and planning professionals to learn about the issues and opportunities facing Ottawa and start the process of finding better solutions.

Mayor Chiarelli has not only challenged his community to develop better, smarter ways to plan their urban environment, he has joined with other civic leaders such as **Winnipeg's** Mayor Murray to challenge the fundamental structure how Canadian municipalities are created and their legislative relationship to their "empowering" senior levels of government. With growing urbanization civic leaders in Canada are questioning whether cities be creatures of the Province or can this model generate the financial resource base needed to meet the service demands of urban residents. .

**Community
Coalitions Bridge
Wide Range of
Interests**

Leadership also comes out of the community from individuals and organizations that have a passion for a new approach or particular issue. The most successful community coalitions bring together a wide range of community interests targeted towards a desired outcome. A review of the National Neighborhood Coalition website highlights hundreds of examples of grassroots leadership.

Coalitions such as The Bay Area Transportation and Land Use Coalition (1997) from **San Francisco** are comprised of 60 organizations including transportation advocates, faith-based groups, environmentalists, community development organizations and senior citizen's advocates. Their primary objective was to develop an alternative regional transportation plan to develop better access to public transit and ease the area's reliance on cars. This coalition was instrumental in the re-instatement of \$375 million in transit funding for the Bay area.

The Community Engagement Demonstration Project highlights how local community residents came together in **Los Angeles** to create better schools that would become both centers of learning and centers of their community. The Beverly-Kingsley Neighborhood Association – a community/civic steering committee – worked with the local school board to develop a new set of smaller, better-sited elementary schools. In addition to serving the educational needs more effectively, sites proposed would replace blighted commercial properties (a greyfield site) in the area. The process was so successful it has been replicated through out the district, and will potentially impact school siting for 85,000 students in Los Angeles.

"Cities are transforming all over again from 19th century agriculture centres, to industrial manufacturing center, and now to new realities. The (financial) solutions of the 1950s and 1960s just won't cut it."

Mayor Murray
Winnipeg
Ottawa Smart Growth
Summit

Leadership

(continued)

**Private Sector
Organizations**

While community coalitions may involve some private sector participants, there are also examples of leadership emerging from private sector organizations. These organizations see opportunities within their business sector to improve their members' bottom line, while enhancing the communities that they do business in.

The concept of triple bottom line – economic, environmental and social – is gaining a momentum as investors expect the corporate community to assume its fair share of social responsibility.

The National Association of Home Builder's "Building Homes in American Cities" program is an example of private sector leadership. The program works with its membership across the US to minimize barriers to infill development, share success stories, advocate for local government support, seek media attention for innovative projects and develop construction trade training programs.

Individual business interests have also taken leadership in moving forward "Smart Growth" initiatives. From programs like **Minnesota's Ride Share Buck** program, that offers commuters who share a car cash discounts in local merchants to major land conservation programs funded through **international corporate programs** such as Shell's Environmental Fund or smaller urban challenges such as **Shell Canada's School Ground Naturalization Project**.

Either individually, collectively with other industry representatives or in partnership with public sector interests, private sector leadership is an important ingredient to the urban planning mix.

***"Bringing
market-rate
housing back to
the cities is
critical to any
effort to revitalize
the nation's cities
and older
suburban
markets. Step by
step, block by
block, we will
begin to see the
rebirth of our
nation's urban
centers."***

Charles J. Ruma
President (1999),
National Association
for Home Buildings

Leadership
(continued)

Lastly, but often most vocally, special interest advocacy groups offer leadership to the urban planning environment.

Advocacy Groups

The advocacy community is becoming more and more organized, professional and effective at developing alternatives, keeping the public pressure on decision-makers and galvanizing the public towards their cause.

**Advocacy
Increases
Awareness**

The Sierra Club's Sprawl Watch program is a good example of an international advocacy thrust linked into local chapters. These chapters deal with the urban sprawl issues that are closest to their community, while benefiting from the international network of information and expertise.

Smart Growth BC, a non-profit society devoted to creating more livable communities, has published several resources for municipalities and citizens including The Smart Growth Toolkit.

**Galvanizing the
Community**

Local organizations champion diverse passions from heritage buildings to bike trails; from water quality to street safety; from road construction to community building events. These issue leaders are excellent at getting their issue raised on the public radar screen. They increase awareness that sets the stage for community action.

The passion of advocacy organizations – while strength in some cases - can be a barrier if advocates become so focused on their solutions they are blind to other alternatives. Successful "Smart Growth" urban planning strives for solutions that offer benefits to a wide range of interests avoiding win/loss situations. This requires a respect between partners and the commitment to move forward past the rhetoric and stereotyping.

Leadership can come from top down or bottom up, from advocates or business; however, for change to achieve success case studies show that the leadership must galvanize the community and have the ability and resources to convert interest, enthusiasm and vision into sustainable initiatives that demonstrate the benefits of change.

"We could pretend that when we do grow it somehow will not affect us; it will not alter our landscape; will not pollute our environment. It will not raise our taxes and it will not change our quality of life. Or, we can plan for growth in the best way we know how."

Governor Parris
Glendening
Maryland Web Site

**Creating a
Shared Vision**

Leadership without a defined destination to strive towards doesn't work. An important principle of "Smart Growth" is the development of a 'planning destination' or a vision of what the community should be like. With the vision crystallized it is easier to define strategies and partners to achieve the community's goals.

The following examples define and highlight the most popular approaches used to create a vision for "Smart Growth".

**Smart Growth
Summit Definition**

The *Smart Growth Summit* provides a public focal point or catalyst for the community to come together to define what their community should be like in 10 or 20 years. The Summit usually is a combination of presentations, information, and facilitated discussion around urban design, transportation issues, growth pressures, economic development opportunities, environmental issues and municipal or regional service delivery expectations. Summit participants include a combination of interests and influencers in the community as well as public at large. The process often is the first step in a more comprehensive land use planning exercise such as the creation or revision of a municipality's Official Plan. Results may be used as one input into strategic planning and land use-planning priorities or may form the Vision and Guiding Principles of a community.

Examples**Ottawa 2020 Smart Growth Summit:**

- { It was a 3 day event held in June 2001 supplemented by 2 days of Town Hall Meetings on specific topics.
- { A public/private advisory committee chaired by the Mayor planned it.
- { Over 500 participants/day attended sessions representing all aspects of the community including youth.
- { North American speakers provided contextual information.
- { Background material was developed and distributed through a web site and a printed package. Information was broken down into the following packages:
 - o Development in Ottawa – A History
 - o Transportation – Getting Around
 - o Structure & Patterns of Growth – City of the Future
 - o Sustainability
 - o An New Economic Vision
 - o Arts, Culture and Heritage
 - o Social and Housing Needs – Striking a Balance
 - o Sustaining our Rural Communities
 - o The Livable City – Everything is Connected
 - o Making your Voice Heard Now – Youth Summit
- { The Summit was broadcasted on cable and through a web cast feature on their web site.
- { There were over 7,000 hits on the web during the Summit offering incremental public input opportunities.

***"Your ideas were
the secret
ingredient in our
summit. We've
got new
information, new
ideas and new
ways of looking
at old problems."***

Mayor Chiarelli
City of Ottawa.

Shared Vision
(continued)**Growing Smarter: Land Use in Pennsylvania Conference**
A similar format as Ottawa targeting 1,400 participants**Visioning –
Multi-step
Process
Public/Private
Consortium Led**

An alternate approach starts with a core of community leaders who create a public/private alliance that broadly define a vision based on the partners collective experience. Rather than using a summit approach the Visioning Team uses a multi-level strategic planning approach to foster grassroots participation and multi-levels of support to achieve the goal.

The most common model is the establishment of a separate authority with arm's length accountability to all its partners. A board representing all key community and funding interests usually manages these authorities. They may operate with staff or by sharing the staff resources from existing organizations. The most successful examples undertake the following activities:

- { public consultation sessions and surveys,
- { develop position papers on growth management and planning scenarios,
- { support demonstration projects,
- { undertake advocacy activities to secure political will.

These organizations also offer various business, community and political interests a neutral environment to air concerns and find alternative solutions that aren't driven by any one interest.

Examples**EnVision Utah:**

- { It is a public/private sector partnership formed to guide the development of a quality Growth Strategy for the Greater Wasatch Area of Utah.
- { The Board is comprised of a wide range of senior political, business, environmental and community leaders.
- { This was implemented in a 4-phase process.
 - o Inventory – Formation of Partnership and Technical Committees, Value Research and Baseline Inventory
 - o Scenario Development – Workshops, Scenario Development, Public Survey and Public Response
 - o Quality Growth Strategy – Development of Strategy and Community Presentations
 - o Implementation – Community Design Workshops, Demonstration Projects, Implementation Toolbox, Transportation & Land Use Study
- { The 4 planning scenarios were shared through a mass media and education campaign including the distribution of over 580,000 surveys.
- { The public participation was significant – over 175 public meetings, 6,000 participants, 20,000 questionnaires completed.

***"The
neighbourhood
structure is the
catalyst that pulls
all else together."***

Andres Duany
Politics of Place
Presented at
CNU 2000

Shared Vision
(continued)

**Public/Private
Consortium Led
Examples**

Envision Utah (continued)

- { They offer educational and information tools (Envision Utah Toolbox) to help communities or neighbourhoods implement the vision.
- { Key planning and logistics support comes from the Governor's Office of Planning and Budget. They provide technical information to assist in impact assessment of growth, impacts of transportation alternatives, air quality, land use, water supply/demand and infrastructure costs. This has required over 70,000 work hours.
- { The process will drive state incentives to local areas and local incentives to developers.
- { They are currently working with various jurisdictions to implement the vision and keep it current.

**Chattanooga –Vision 2000 (1980) Revision 2000 (1992) to
Futurescape (1996)**

- { Business, political and community leaders led it.
- { Emerged into a comprehensive public input process involving 1,700 community participants.
- { Process funded through by Lyndhurst (Coca Cola) Foundation
- { This process identified 40 goals of which 37 were completed by 1992. Many of these involved re-creating a sense of place and renewed economic development potential in the community.
- { Process repeated in 1992 with an emphasis on sustainability.
- { Futurescape consultation occurred through 83 public meetings with over 2,500 citizens focusing on urban design and planning.
- { Participants completed a written survey surrounding quality of life issues.
- { Workshop participants viewed and reacted to 240 different images of what the community could be like. Each of these was ranked from 1-10.

"Because the old strategy – low taxes, low cost of land and construction, low wages and cheap power – wasn't working any more. We believe working together works – supporting collaboration, planning and community building will lead to better decisions, more positive change."

Scottsdale – Cityshape 2020

- { A Steering Committee accountable to the City is used to guide process rather than a formal authority or not-for-profit corporation.
- { The Steering Committee utilizes a series of Advisory Team Issue Groups and Citizens' conferences to gather input based on a review of the existing plan.
- { The revised plan is built around 6 guiding principles supported by a series of strategies that demonstrate how the principles or concepts can be operationalized.

James Vaughan Jr.
President,
Chattanooga
Chamber of
Commerce
Chautauqua
Conference on
Regional Governance
June 1997

Shared Vision
(continued)**Public/Private
Consortium Led
Examples****Scottsdale – Cityshape 2020 (continued)**

- { Topics included
 - o Preserving Meaningful Open Space
 - o Enhance Neighbourhoods
 - o Support Economic Vitality
 - o Seek Sustainability
 - o Advance Transportation
 - o Value Scottsdale's Unique Lifestyle and Character

Cambridge Futures – Cambridge, UK

- { It is a not for profit organization representing business, government, community and academic interests.
- { They developed a visioning report and exhibition as a catalyst for community dialogue. This outlined planning options and the economic, social and environmental implication for the quality of life in the region over the next 50 years.

**Visioning –
Multi-step
Process Led by
Government**

The third model sees the visioning and implementation driven by government (local, region or provincial) with strategically focused input from communities and priority stakeholders. Input may come from independent submissions, direct interviews, selected community meetings or blue ribbon stakeholder workshops. The vision is drafted and communicated to the public for reaction. This process is usually faster and cheaper than the broader consultation models, however may require more "marketing" to secure the needed "buy in" from various factions within the community.

Examples

Edmonton – Plan Edmonton
Toronto – Toronto at the Cross Roads
Denver – Metro Vision 2020
Minnesota – The Big Plan
Greater Vancouver Regional District – Livable Region Strategic Plan
Charlotte/Meckleburg Region – Vision 2010

***"The vision for
the future cannot
be one person's
vision – everyone
must share it."***

Rick Holt
Urban Land
April 2001

The "Dream to Reality" Team

Visions don't turn themselves into reality. A "Smart Growth" vision needs to be nurtured and championed over the long term. Whether it is a neighbourhood re-vitalization vision or a regional economic development dream, success requires skills, resources, tenacity and a fresh injection of community spirit.

It is easy for "Smart Growth" principles and initiatives to get lost in the day-to-day priorities facing government. The emergence of "Smart Growth" Secretariats, Re-vitalization Authorities, Urban Renewal Councils, Local and Regional Inter-municipal Planning Councils and Community Coalitions is a testament to the importance of having a dedicated organization to champion the change.

"Smart Growth" Office Integrates Actions Across Disciplines and Partners

Maryland's Governor's Office of Smart Growth has been mandated and staffed to ensure continued visibility of the issue. The new secretariat is empowered to assist municipalities within the state to implement "Smart Growth" projects. They provide an important inter-departmental coordination role, access to funding and technical assistance to smaller municipalities.

Partnerships Deliver Specific Components

Some communities implement their "Smart Growth" initiatives through a variety of organizations mandated to handle specific activities related to the plan. These include interdisciplinary partnerships such as **SMARTRAQ in Georgia**.

The SMARTRAQ partnership includes the Urban Land Institute, Metro Atlanta Chamber of Commerce, the Georgia Conservancy and Georgia Tech. It undertakes land use planning and transportation research. In addition they implement community outreach activities that offer planning education and dialogue opportunities with the community. The partnership identifies barriers, gaps and alternate solutions for consideration by the key decision-makers in the metro Atlanta region.

Existing Inter-Municipal Organizations Staffed for Implementation

Other organizations are mandated by legislation to deliver specified regional services. These existing organizations can be easily re-focused to implement specific strategies that emerge through "Smart Growth" planning. **Vancouver's GVRD** becomes an implementation instrument to move forward selected initiatives of this region's "Livable Region Strategic Plan". GVRD can implement transit, transportation and green zone initiatives because they are currently mandated to deliver these services and have the resources and authority to impact change.

The Team (cont) Very specific re-development corporations such as **Milwaukee River Walk Development Authority** or **Pittsburgh's Urban Redevelopment Authority** are created to tackle very specific targeted "Smart Growth" projects like these massive brownfield redevelopment initiatives. On a smaller scale, **Edmonton's Downtown Development Corporation** has championed revitalization of the core.

Designated Authorities' Initiatives

Neighbourhood or Faith-based Coalitions Implement Strategic Projects Social and housing components of "Smart Growth" strategies are often championed by very specific neighbourhood coalitions. A growing number of these coalitions are supported by **faith based organizations** such as **Bethyl New Life in Chicago** or **BREAD in Columbus, Ohio**. These organizations have demonstrated that they offer unique attributes needed to champion change at the local level.

They bring grassroots community development expertise and access to philanthropy funds to implement low-income housing and community development projects. These agencies' social commitment expands their credibility with local homeowners, landowners and residents. By effectively tapping into existing community member's social conscious these groups have successfully minimized the NIMBY reaction that can emerge when change is proposed within a specific neighbourhood.

Commissions Monitor Compliance While some organizations implement action, others such as **Oregon's Land Conservation and Development Commission** monitor compliance. This state appointed board ensures that there is compliance and consistency between state and local land use planning. The Commission brings to the process public consultation and a link between the two levels of governments. This provides one measure to ensure that Oregon's long-term commitment to "Smart Growth" planning continues.

Implementation Teams Need Resources and Power Whether the implementation team is focused towards one task or oversees a multi-dimensional strategy the organization needs to be resourced appropriately. Volunteer enthusiasm and commitment can drive the vision, but it will suffer burnout if there isn't enough human and financial the support to sustain the implementation phase.

Lastly the power to change or quickly influence change is critical. Those organizations or "Smart Growth" offices that are linked to the highest authority through direct reporting relationships or through board appointment have the greatest chance of achieving success.

" There is a fear of taking on these major issues without a cohesive strategy and the resources to back it up."

Allan Jennings
Executive Director,
Community Action
Committee for
Leigh Valley
"Smart Growth- Better
Neighbourhoods
Communities leading
the Way"

**Communicating
the Vision ...
... and the
Progress**

Regardless of the size or scope of the visioning and planning process, most communities reviewed stressed the importance of an effective and sustained communication program.

The communication goals drive the design of the communication activities, however it is important that both the process of planning and the product resulting from the planning exercise be communicated. The communication program should be frequent, sustained and relevant. This helps to keep top of mind awareness over the long term goal.

**Various Tactics
Used**

To create awareness various tactics have been used.

Envision Utah used newspaper advertising, media editorial as well as a community survey inserted in the local paper to raise awareness of the issues. **Atlanta** sponsors a special weekly feature in their local paper to keep the issue top of mind. Advocacy organizations such as the **Sierra Club** sponsored a Mid West Tour de Sprawl featuring a quest speaker series in several communities. Some communities, **Calgary and Seattle**, take an education thrust by organizing multi-dimensional symposiums where the local business community can learn more about the alternatives and options. **Rochester, NY** used billboards to highlight the impact of urban sprawl. **Cambridge, UK** hosted an exhibition that showcased the issues and design alternatives to the community, while many other communities have used displays in malls, public buildings and at special events.

Most communities have recognized the importance of communicating information and have produced brochures, information sheets, backgrounders and web sites to promote and communicate their initiatives.

**Web Site
Powerful Tool**

The introduction of web site technology has dramatically changed the ability of groups to reach wide audiences in an interactive way. Web sites and e-mail technology provides a very cost effective way to educate and communicate with many people in a "real time" manner. However, this tool can lead to an overload of incorrect or irrelevant information. More information does not always contribute to better decision-making.

Many communities and organizations have websites that offer information, links and contact information. A couple of the web sites had some interesting features that are worthy of noting.

National Geographic (www.nationalgeographic.com) has an excellent website "A Virtual World, The New Suburb" which uses the technology to show what New Urbanism looks like.

"Keep channels open to elected official, civic leaders and staff in all affected agencies. Clear, concise reporting through newsletter, brochures, and a web site will help launch discussion of smart growth into the community at large."

Uri Avin and
David Holden
Planning
January 2000

Communicating
(continued)

Rochester, NY uses its web site (www.ci.rochester.ny.us) to show alternatives to urban sprawl by showing how the inclusion of different street or design elements would change the look of their community.

Ottawa took the web technology to new lengths with web cast broadcasts, chat room discussions and information sharing.

This is clearly a powerful, cost effective tool that is becoming the communication medium of choice for many initiatives.

Because the issues are complex and the information can be overwhelming, many communities are looking to how they package the material to make it "use-friendly" to a broad range of audiences.

**Packaging
Information
Improves
Understanding**

Austin developed a "*Smart Growth Map*" that is a simple visual tool that identifies their 'desired development zones' and their 'watershed protection zones'.

Toronto packaged strategic information from the Toronto Plan in a similar way with the development of a *colour coded map, supported by illustrative photographs and simple description of the objectives*. They have also packaged *their overall plan into 5 campaigns* around the "Great City – Great Living" theme.

**Communicating
Successes
Important to
Sustain Interest**

Communicating success helps to retain interest and maintain fresh commitment to long-term initiatives. Advocacy organizations such as the Sierra Club use a "*sprawl report card*" highlighting successes and failures. Other communities use award programs to focus media and community attention on the results the leaders who have achieved them.

Awards may come from government such as **Pennsylvania's Governor's Award for Environmental Excellence and Local Government Excellence** or **Colorado's Smart Growth Award** or alternately from community based organizations such as **Sustainable Seattle**. This approach rewards effort, re-charges participation and keeps the benefits front and center with decision-makers.

**Communication
Principles Remain
Consistent**

Regardless of the communication tactics the fundamental principles of effective communication remain the same.

- { Communicating early and often.
- { Choose the right tool to the right objective...cookie cutter approaches don't work.
- { Dialoguing in a meaningful way.
- { Package the information in an easily understood manner.
- { Communicate the message through multiple mediums.
- { Balance the need to inform with selling the concept.
- { Keeping the message current and relevant to the community.

"The signs (15 billboards on different aspects of zoning, including adult entertainment zoning) were very successful in catching people's attention. Everybody wanted a piece of the action, we actually made the editorial page of one of the girlie magazines"

Margaret Wuerstle
Director Zoning
Rochester, NY
New Urban News

**Tool Box for
Changing
Communities**

The following section provides a brief definition of the key tools that are used to achieve growth management and more livable communities and a listing of how selected communities have used these tools.

**Urban Growth
Boundaries ...
what are they?**

One of the most popular tools to curb urban sprawl, the Urban Growth Boundary (UGB) defines an area that will contain existing and future urban growth. Within the UGB, there is between 10 and 50 years of urban development potential. The land is zoned to reflect urban density, transportation and recreational needs. The UGB is used to define the edge between urban and rural land uses or between urban development and environmental reserves.

UGB's may be legislated by senior levels of government or designated through land use planning bylaws at the local level.

UGB's are implemented for some of the following rationale:

- { to minimize encroachment on agricultural lands or,
- { to encourage higher density, inner city or infill development or,
- { to increase utilization rate of the existing urban service infrastructure by reducing leapfrog development or,
- { to reduce road construction or municipal servicing requirements or,
- { increase transit usage by encouraging higher density within the existing transportation corridors or,
- { to reduce air quality concerns resulting from traffic congestion or,
- { to protect surrounding watershed areas and sensitive environmental lands.

Most UGB's have the provision for expansion based on the urban development needs. However, they have tended to slow urban sprawl and increase urban density rather than stop growth completely.

Areas that use a UGB often subdivide the approved urban growth area within the boundary into segments with respective zoning to support the appropriate use. These include the urban core, urban clusters, urban strips, contiguous development areas, near-continuous development areas and the balance of the urban growth area.

An urban development area – the area within the UGB - attempts to focus the development patterns but has difficulty eliminating development outside the boundary completely.

"Boulder has a vibrant downtown and remains a highly desirable place to live and work. Boulder's real secret is that it has taken control of its own destiny"

Growth Management
Strategies and the
Law of the Fringe

Tool Box (cont)**Urban Growth
Boundary****Examples****Oregon:**

- { State legislation since 1973 has required UGB for all municipalities.

Portland Metro:

- { Portland Metro initiated UGB in the 1970's.
- { They are currently updating the UGB through a 2040 Plan to include a 50 year supply of urban growth land.
- { Portland has delayed sprawl by increasing density, but the region continues to expand outward at a rapid pace.

Washington State:

- { The regional government is responsible for the Urban Growth Areas. In the Seattle/Puget Sound area the Growth Management Planning Council manages the process.
- { The boundary holds a 20-year land inventory.

Denver:

- { Their growth boundary is voluntary.
- { It is planned every 5 years with an annual review. The process involves consultation with neighbouring communities.
- { Denver provides a financial incentive for development within the boundary by offering developers better servicing and lower development costs.

San Jose:

- { Their growth boundary allows for an 8-10 year window of development.
- { They also require environmental reviews to assess development impacts.
- { Municipal water and sewer services are limited to within the UGB.

Boulder:

- { Their UGB was defined by altitude in 1959. Growth was not allowed above 5870 feet to curb the degradation of the view of the mountains.
- { Their UGB policy initially contributed to very rapid growth in nearby **Superior**, leading Boulder to adjust their land acquisition policy to include the purchase of strategic land in surrounding communities to curb sprawl in their region.
- { The UGB currently includes both the City and the County.

Land**Conservation and
Preservation -
Greenways, Parks
and Reserves**

Viable urban communities offer residents a diverse urban landscape. This includes areas where they can escape the built environment. Not only do these areas offer a respite from the urban pressures they also contribute to the health and safety of our community. Trees counter the impact of greenhouse gas emissions, naturally forested areas reduce land erosion and watershed areas provide clean water for our communities.

***"The UGB
(Portland) has
helped frame this
monumental
effort (of
revitalization),
but it has been
the effort, not the
frame, that has
produced these
enviable results."***

Gerrit J. Knapp,
Public Investment
American Planning
Association,
December 2000

Tool Box (cont)

Conserved Land

Greenways are a natural corridor within the urban environment. They also create a linked network of dedicated "green spaces and provide corridors for wild life migration or the protection of watershed areas. Some greenways have no development while others offer recreational trails and amenities throughout the corridor.

Some greenways become the natural UGB with little or no development while greenways incorporate bike or walking trails that create a natural network linking neighbourhoods, parks or other conserved areas.

With growing urbanization, preserved land provides an important outdoor schoolroom for children to learn about their natural heritage.

Conserved or protected land is achieved through a variety of zoning and land acquisition strategies. These include the following:

- { designation of land through the development process as municipal or park reserve or,
- { purchase of the development rights from the owner or,
- { use of conservation easements, tax or regulatory relief on the land or,
- { land stewardship subsidies or land donations or,
- { outright purchase that is funded through the tax base, private fundraising, user fees or diversion of sales tax.

Examples

New York State – Hudson River Valley Greenway Community Council and Greenway Conservancy for the Hudson River Valley:

- { Works with 242 communities, local government and organizations to undertake voluntary cooperative planning of the area and redevelopment of the area
- { Developed trail and river system, tourism destination area and preserves agriculture in the area.
- { Regional cooperation was very important to succeed.

Oregon - Willamette River Greenway

- { This project was driven by the need to manage the watershed issues for the area.
- { The greenway is created by a 100 foot buffer along the river.

San Francisco Greenbelt

- { The project is spearheaded by a well-organized community coalition established in 1958.
- { Over past 40 years have helped to save 600,000 acres of greenbelt lands in the San Francisco Bay area.
- { They offer education material and outdoor experiences to improve appreciation and understanding of the greenbelt.

"I've worked all over the country, and I can tell you there's not a single organization anywhere that has the track record in protecting open space that Greenbelt Alliance does"

Brian O'Neill,
Superintendent,
Golden Gate National
Recreation Area
Greenbelt Alliance
Web Site

Tool Box (cont)**Conserved Land
Examples****San Francisco Greenbelt (continued)**

- { Through coordinated advocacy the Alliance spearheads individual initiatives to reach their conservation and urban reform objectives.
- { Their activities have also extended into regional transportation planning as well as a Fair Share Housing project.

Edmonton River Valley and Ravine System

- { The City has preserved over 7400 ha. of land over the past 80 years
- { Land is designated through the development process as municipal or environmental reserve

Waterloo – Environmental Lands Acquisition Program

- { This project supports Waterloo's 'environment first' priority and a sub-watershed planning approach.
- { Over the last 5 years they have acquired 830 acres of environmentally sensitive land within the City of Waterloo

Boulder – Land Preservation Program

- { The City preserved over 20,000 acres.
- { The funding for the land acquisition came from 1% of the local sales tax and through the sale of municipal bonds.
- { The purchase was justified by demonstrating the net savings to taxpayers. The current net cost for municipal servicing of a developed lot was \$3,000/acre compared to \$75/acre for conserved land.

Maryland – Rural Legacy Program

- { The state offers funds to protect and conserve farm and forested lands.
- { The funds are competitively allocated each year from a fixed budget.
- { Agriculture is an important industry for the state economy. In addition this initiative supports strong heritage and cultural ties with agriculture.

Legislation

Most legislative measures for growth management have occurred at the State or Provincial level rather than the Federal level. Legislation falls into three categories.

- { It defines regional and municipal requirements through statute.
- { It sets land use, environmental, health and safety standards that municipalities must manage within.
- { It provides incentives for preferred activities.

Tool Box (cont)**Examples****Maryland**

- { 1997 Smart Growth Areas and Neighbourhood Conservation Act – Offers State funding for projects in priority areas.
 - o Greenprint – Preserve environmental areas
 - o Community Legacy – Revitalization Program
 - o Land Legacy – Rural land conservation
 - o Neighbourhood Parks
- { 1997 Economic Growth Resource Protection Act
- { 1997 Brownsfield – Voluntary Cleanup & Revitalization Act

Georgia

- { 1999 Regional Transportation Act – Directs transportation priorities and funding to support "Smart Growth" practices particularly in the metro Atlanta region.

New Jersey

- { 1997 new Building Code for Older Buildings – Streamlining the development approval process and the project viability with the private sector.
 - o Within the first year building renovations increased between 40 – 80 % in various communities.

Oregon

- { 1973 Land Use Act – Requiring Urban Growth Boundaries
- { 1991 State Transportation Rule – Encourages high-density, mixed use villages around transit stops

Massachusetts

- { 1996 Planning for Growth Executive Order – Provides grants for municipalities to reuse and revitalize existing infrastructure.

Minnesota

- { Livable Community Act – Funds demonstration projects of mixed-use walkable communities such as St. Louis Park Town Center.
- { Fiscal Disparities Act – Equalizes commercial and industrial taxes within a region.

Wisconsin

- { 1999 Smart Growth law – Promotes New Urbanism developments
- { Provides municipal dividends for encouraging the building of affordable housing units.

Ontario

- { 2001 Brownfields Statute Law Amendment Act – Sets out clear rules for clean up, environmental liability, monitoring cleanup accountability and community improvement plans.

"A more market-oriented approach is likely to be much more sustainable in the long run, but it requires rethinking the way we do development control on the local level."

Sam Staley, Ph.D.
Director, Urban
Futures Program
Reason Public
Policy Institute,
LA, California

Tool Box (cont)

Zoning

Municipal zoning provisions are the workhorse tools of urban planning. They offer a municipality the flexibility to guide the location and type of development. Examples of using zoning to support "Smart Growth" fall into the following categories:

- { Density Considerations - Increasing the approved density for development in targeted locations such as the inner city, along transit corridors or in a mixed-use area.
 - o Increase height
 - o Increase land coverage
 - o Decrease set back from curb or neighbours
 - o Density trading from low density area to a preferred density zone
- { Parking and Site Development Requirements
- { Municipal Reserve Requirements
- { Design Guidelines
- { Street Alignment and Transportation Requirements
- { Land Use and Housing Mix

Examples

Guelph

- { Parking requirements reduced when downtown buildings are renovated.
- { Height restrictions are in place in the heritage area to retain the character of the neighbourhood

Santa Fe

- { Design guidelines ensure new commercial development maintains adobe character.

Waterloo

- { Limits development based on the amount of impervious surface areas in the community. This is designed to balance the use of natural land for water absorption and management with the demands on the drainage and water treatment system.

Toronto

- { Created new mixed use and re-development zoning to encourage growth that would maximize the use of the current urban infrastructure.

Cobourg, Ont.

- { Offers transit supported residential density along its three corridors leading to downtown. Unfortunately higher density residential currently does not have much market appeal.

Edmonton

- { River Valley Bylaw that restricts development in the North Saskatchewan River
- { Mature Neighbourhood Overlay supports sensitive infill housing.

"The local government level is where the fight to build better neighborhoods is being fought".

Rick Holt
Developer Fairview Village
Member of Portland Planning Commission
New Urban News
March/April 2000

Tool Box (cont)**Zoning****Examples****Boulder**

- { Capped building permits to contain population growth to 2% per year.
- { Required new residential building permits to include 15% of the new units to be targeted to low/moderate income residents.

Portland

- { Capped downtown parking

**Public
Investment in
Infrastructure**

Public sector investment in infrastructure is one of the most commonly used incentives to encourage strategically targeted development. Investment occurs in several ways.

- { Repair and replacement of aging core infrastructure (sewers, water, roads, sidewalks)
- { Strategically siting new recreation, parks, culture or community facilities
- { Directing school construction (renovation vs. new schools)
- { Road construction
- { Transit and other public service levels
- { Reclamation or restoration of degraded land or buildings

The size of the projects varies. In some cases they are major re-development of large tracts of land. These often occur in areas where old industrial sites (brownfield) have been targeted for reclamation or where rivers and the riverbanks are being cleaned up for re-development. In some cases the investment is in 'human infrastructure' to support and monitor development.

The New Urbanist approach leans to smaller development that is scattered through the community. This creates more local neighbourhood incentive for re-development. These projects might include the siting of a public library, a new park, renovating an existing school or enhancing transit service to a priority area.

Some of the investment comes from re-directing current spending priorities such as routine park development, new school construction, recreational and transit services and other investments are incremental activities.

Incremental development is often triggered by the ability to access incremental funding, environmental pressures to clean up contaminated sites or infrastructure requirements for major national or international events such as Expo or the Olympics.

This infrastructure investment reduces the risk for incremental private sector investment to occur in priority areas. This leads to a new sustainable tax base and an improved quality of life.

"But smart growth is about connections, and the west side flats (40 acres along the river in St. Paul) will be a stitching together of the community"

Patrick Seeb
Executive Director
St. Paul Riverfront
Corporation
Urban Land,
April 2001

Tool Box (cont)

**Public
Infrastructure
Examples**

Calgary

- { Growth Area Management Plan – focused on infrastructure capacity analysis and creating an information base to make decisions coordinating development and infrastructure.

Edmonton

- { Public infrastructure investment in the River Valley communities of Rosssdale and Cloverdale
- { CN/CP rail yard redevelopment program on 109 St. and 104 Ave.
- { Infrastructure investment in 13 neighbourhoods through the Neighbourhood Improvement Program

Toronto

- { Waterfront Restoration

London, Ontario

- { Downtown Arena and Entertainment Complex
- { Integrated bike path system

Vancouver

- { False Creek Development and Expo lands

Glasgow

- { Clyde Bank Redevelopment -conversion of aging ship yards

Maryland

- { Locates any new State facilities in priority zones including University of Maryland, State courthouses, hospitals etc.
- { Re-directed more of the school construction budget to renovation (80%) than new school construction

Fruitvale, California; Oakland, Portland, Arlington

- { Transit infrastructure built to support the new transit orientated village development.

Milwaukee

- { Riverwalk Development – Cost shared with downtown property owners the \$13.8 million capital costs.

Mertyl Beach

- { New state of the art business park built. No other business park development will be permitted.

Waterloo

- { Transportation Management Coordinator hired to improve alternate transportation and land use planning.

Pittsburgh

- { Cost shared on slag site (Frick at Somerset) reclamation with private sector developers and financial institutions.

Santa Fe

- { Downtown rail yard reclaimed into an urban park.

Dallas

- { \$6 million investment in new streets, sidewalks and drainage in Uptown, resulted in \$300 million in private investment.

"The rail connection, which was in place right from the start, is a part of an alternative lifestyle offered by Orenco Station. As a part of the deal with Tri-Met, the transit agency (Portland), new residents get a rail pass for a year. Many new homeowners are not thinking much about light rail when they buy, but over time they realize what a great amenity it is."

Rudy Kadlub
President, Costa
Pacific Homes
New Urbanism

Tool Box (cont)

The second major financial lever that communities use to manage growth is direct financial incentives.

Public
Investment in Incentives

They may be in the form of

- { direct grants or,
- { income or property tax credits or,
- { property tax holidays or,
- { location efficient mortgages or,
- { transit-orientated development tax credits or,
- { loans or loan guarantees or,
- { the waiving of development, servicing and user fees.

Disincentives may also be used to limit or curb non-desirable activities. These generally relate to curbing urban sprawl, reducing traffic congestion and minimizing environmental impacts. When the carrot doesn't work, several communities use the stick to drive community-supported change.

Disincentives would include the following:

- { Transportation levies to cover the cost of road construction away from the core.
- { Impact fees to cover increased servicing costs for new infrastructure.
- { Environmental penalties for impacting air or water quality.

Most communities have found more success with incentives than penalties but as noted a few are using this approach to influence market forces that continue to promote urban sprawl.

Examples
Winnipeg

- { Urban Development Bank – promotes economic growth in the downtown using heritage tax credits, loans, loan guarantees, funding for feasibility studies and technical assistance.
- { Neighbourhoods Alive Program – direct assistance for individual neighbourhood re-vitalization program (\$2 million in 2001).
- { Home Renovation Tax Assistance Program – Grant and tax deferral program for renovating older homes under \$90,000.

Edmonton

- { Downtown Housing Reinvestment Grant Program targets creation of residential units through new construction and major conversion/renovation of existing commercial buildings. Initially established with a City budget of \$4.5 million and has contributed to the construction of 1000 units downtown.

Maryland

- { Voluntary Clean-Up Brownfields Program – A combination of grants and low interest loans for cleaning up targeted brownsites.

"Leasing conservation easements provides much needed cash flow to struggling farmers and ranchers. It also makes it easier for their children to inherit the land and to continue to work it."

Governor Bill Owens
November 1999
State of Colorado's
Smart Growth
Web site.

Tool Box (cont)**Public Incentives
Examples****Guelph**

- { Downtown Residential Incentive Grant Program – Targets renovation of upper floors of existing buildings into mixed use from single commercial use. This program reduces taxes for 3 years.

Chattanooga

- { Chattanooga Neighbourhood Enterprise – Funds \$23 million/ year on housing repair and building renovations

London

- { Development charges waived for downtown development
- { Façade Restoration Program – Grants to preserve heritage facades.
- { Urban Works Reserve Fund – Voluntary development fund to develop selected projects. This is incremental to routine development service charge funds.

Colorado

- { Tax incentives to assist low-income workers to purchase homes.

Pittsburgh

- { Split Tax Rate Program – Taxes buildings at a lower rate than undeveloped or vacant land to provide an incentive for development.

Austin

- { Financial incentives range from tax holidays to waiving of development and utility costs based on an assessment of the project against the City's "Smart Growth" matrix.

Calgary

- { Transportation levy on new suburban development

Lancaster, California

- { Impact fees of 2% surcharge on development fees for each mile located outside the city core

Chicago

- { Using Hope IV federal funding from the Department of Housing and Urban Development re-placed "superblocks" of public housing that created unsafe dysfunctional neighbourhoods to New Urbanism style of community.
 - o In this case the funding is tied to implementing the approved planning process and New Urbanism principles of neighbourhood design

Hundreds of examples exist of using public funds to lever private sector investment with the expectation that the community's quality of life will benefit and the tax base will be strengthened over the long term.

The fundamental principal that must always remain top of mind is that the ***project must be viable over the long term***. Without this the public investment becomes pure expenditures.

Tool Box (cont)**Public/Private
Partnership**

The size, scale and long-term commitment needed to affect any significant change in the urban landscape requires a broad base of commitment. The reality of this means more communities are using a partnership approach to attack major urban development challenges.

A partnership means everyone contributes something, everyone benefits in some way and everyone shares some of the risk involved in any new venture. This breaks down the traditional "us against them" that can be so counterproductive to the change process.

As well effective partnerships between various aspects of the community can minimize or manage NIMBY (not in my back yard) syndrome that can stop projects quickly.

The following represent the most popular models of Public/Private partnership:

- { **Not for Profit Corporation** – This is usually a registered corporation that is run by a board and accountable to the funding organizations and key stakeholders. All the funds are raised and invested in the designated project or activity.
- { **Public/Private Consortium** – This is usually set up through a partnership agreement that defines the contributions, roles and responsibilities. Consortia are usually accountable to their funding partners in relationship to the level of each partner contribution.
- { **Public/Private Alliance** – This is a less formal structure where people come together to achieve a task and have no formal structure or accountability. This is usually used in smaller projects that don't involve a lot of funding partners. An alliance may also be used between organizations in advocacy activities.
- { **For Profit Corporation** – Some public sectors have entrepreneurial arms that are mandated to operate as a business, such as a convention center. These enterprises may have private sector partners. In this situation the profits from the activity would be returned to respective shareholders for their use. In the case of a municipal shareholder the municipality would direct the funds to any other municipal activities.

"The agreement we are announcing today (Building Homes in America's Cities) represents another example of how the public and private sectors can team together to help strengthen American's families and communities."

Al Gore
Vice President
February 1999

Tool Box (cont)**Partnership
Examples****Georgia**

- { SMARTRAQ – Urban Land Institute, Metro Atlanta Chamber of Commerce, Georgia Conservancy and Georgia Tech
 - o Transportation and land use research
 - o Community outreach

Utah

- { Envision Utah – Partnership established in 1997 and has numerous public sector, private sector and academic interest.
 - o Drives the Smart Growth Planning process

Minnesota

- { Capital City Partnership includes business interests that created a development framework for St. Paul.

Tulsa

- { Home Ownership Tulsa Partnership – A partnership of builders, area residents, neighbourhood association that focuses on innovative infill development.

Pittsburgh

- { Pittsburgh Economic and Industrial Development Corporation – a member-based organization of the City, private real estate developers, community development organizations, law firms, architects, engineers, foundations and industrial companies
 - o They undertake a variety of projects such as Somerset at Frick Park industrial site.
 - o Administered by the Urban Re-Development Authority

Peterborough Community Housing Development

Corporation – a grass roots community based organization with City linkages that grew out of the Mayor's Taskforce on Affordable Housing (1997)

- { Re-located houses to donated land or civic owned land for low-income housing.
- { Currently pursuing the development of a formal land trust to hold donated land for low income leasing.

Cincinnati

- { Citirama – A group of Cincinnati inner city homebuilders with assistance from the City of Cincinnati developed a Downtown Residential Showcase – promoting infill residential options.

Tool Box (cont)**Ontario**

- { SuperBuild Program – Funds multi-partner projects.
 - o Some communities in Ontario are looking to examples in England and the US that have identified pension funds as being better private investment partners for public infrastructure type projects as they are interested in long-term stable return rather than quick investment return.

Durham, NC

- { University of Duke and Private sector partnership
 - o Residential infill project including 24 single homes and 15 townhouse units.
 - o Re-develop residential land owned by the university into marketable properties based on the New Urbanism.
 - o Price exceeded previous market value in the area by a range of \$5 - \$80,000.

Building Homes in America's City Partnership

- { National Association of Home Builders, Department of Housing and Urban Development, and United States Conference of Mayors.
- { Champions building 1 million infill-housing units.

"Their grassroots organization, the not-for –profit Peterborough Community Housing Development Corporation (PCHDC), has succeeded in capturing the hearts and imaginations of an entire community – one house, and one family, at a time."

Gordon Gibbs,
"A Firm Foundation"
Canadian Living,
November 2001

Tool Box (cont)**Bringing Jobs to Residents Rather than Commuters to Jobs**

As land use planning of the post war period segregated where people lived and worked, the needs of the automobile dominated the urban landscape. The changing nature of our economic base has changed land use separation requirements.

It is no surprise that with commuting times increasing, time management pressures escalating, communication technology expanding and business opportunities changing; that employees are looking to new neighbourhood designs that provide the opportunity to live and work closer together.

As referenced earlier in this review, economic development is an important consideration in the change process. Residents need jobs and jobs mean economic development.

Communities are tackling this challenge in the following three ways:

- { encourage jobs near residents or,
- { encourage residents to move near their work or,
- { provide residential options that mix living and working or,
- { offer alternate, faster more environmentally friendly transportation options.

A challenge facing economic development agencies is the competitive environment for clean 'smart' businesses that are compatible with mixed-use areas.

However, in addition to the 'dream business re-locations' opportunities there are a large number of small or medium sized businesses that can offer local employment and business opportunities that can create a sustainable economic base.

Popular approaches use all the tools in the Smart Growth toolbox as well as the following:

- { Development of business centers or incubator sites to kick start development in priority area.
- { Grants to relocate (business or residential)
- { Enhanced transit service linked to key business sites, neighbourhoods or 'transit villages'.
- { Tax incentives for targeted business relocation.
- { Home-based business zoning.
- { New road construction limitations, tolls and commuting charges.

The goal is to ensure communities and neighbourhoods that are diverse and economically viable while reducing the environmental and servicing impacts required to move hundreds of thousand commuters by car.

*Then it
(Chattanooga)
sought zero-
emission
vehicles - and
found only one
U.S.
manufacturer of
electric buses.
The solution?
The community
started its own
company
(Advanced
Vehicle
Systems). Now it
has the biggest
electric bus fleet
in the country,
and it's the
largest
manufacturer."*

Boundary Crossers,
Academy of
Leadership 1998

Tool Box (cont)

**Bringing Jobs
Examples**

Maryland

- { Live by Your Work Program – Grants (\$3,000) towards buying a house in an older area near employment.
- { Job Tax Credit Program – Income tax credits for small business to re-locate to priority areas.

Eugene

- { Business Incubator facility.

Atlanta

- { Joint venture planning to re-locate 10,000 employees into three priority areas connected to the transit system.
 - o Southern Bell Relocation targeted urban zones based on the employee's residential patterns.

Portland – Orenca, Los Angeles – Village Green

- { Transit village based around light rail transit, commercial development and new residential development. Designed to reduce commuting pressures..

**Common
Information Base
– A tool for all
parties**

While zoning may be the workhorse tool for implementing change, a common information base is the tool to formulate change.

As municipalities reach out beyond the planning professionals it is important that all stakeholders have access to consistent, accurate and easy to understand information.

Community participants that have equitable access to the relevant information can contribute more meaningful input. There is also a far greater opportunity to identify important issues early in the planning stage that could escalate into 'show stoppers' at a later date if ignored.

Through this discussion paper we have highlighted a lot of information tools and communication approaches that are used.

In addition to the communication tools discussed earlier there are a couple of other information issues that have emerged.

The first step a lot of the communities took was the completion of a "Smart Growth Audit". This provides an evaluation of a City's planning quality and capacity, urban form, infrastructure and development process against the principles of "Smart Growth". This common information base can be an important foundation for community dialogue on a new vision and strategic direction.

***"Based on Visual
Preference
Survey...most
people would
prefer to live in a
place with a
convenient mix
of places to work,
shop and relax"***

Sierra Club
Fall 2000
Sprawl Report

Tool Box (cont)

Most cities find that a land and building inventory is an important building block. This can be even more useful if it is set up as a searchable database accessible through a City's web site.

The GBIS mapping technology provides an important visual tool to understand the City's land and building assets and to assist groups in seeing the inter-relationships and linkages found within the city or region.

As noted earlier, web site technology is a very powerful tool for both sharing information and collecting it in a transparent and very accessible manner.

Some jurisdictions invest in shared technical advisors to assist smaller municipalities to understand and implement "Smart Growth" initiatives.

While technology is an important tool, traditional opportunities to learn and interact with others in the community are still a powerful way to share information and foster understanding. These include community conferences, design charrettes, regional symposiums or neighbourhood workshops.

Finally sharing plans, activities and issues openly helps all stakeholders feel that they can participate equitably in the process.

Examples**Charlotte/Meckleburg Region**

- { Undertook a Smart Growth Audit to kick start their process
- { Used design charrettes with community workshops to share design principles and ideas.

Portland

- { GBIS Mapping
- { Technical advisors to small municipalities within the metro area.

Utah

- { Envision Utah's "Smart Growth Toolbox and Analysis Tools

Austin

- { Smart Growth Matrix for assessing development support

London

- { Design alternatives for small lot subdivisions developed and shared with the community.

Waterloo

- { Annual Development Report – highlighting infrastructure staging, servicing and development plans and identifies any problem areas.

"We're revolutionizing the way we engage citizens in planning the future development of our city. Ottawa's new way (website and interactive dialogue) of doing this will make it a model for other cities."

Ned Lathrop,
General Manager -
Development
Services,
City of Ottawa.

**Think
Regionally
No Community
is an Island**

No neighbourhood or community can plan and build in isolation. Whether it is neighbourhood to neighbourhood, community to community, or municipality to Provincial Government; "Smart Growth" planning must be done in collaboration with all the stakeholders and influencers.

In many US centers, the strength of their regional planning is tied to state funding. Most of these regional organizations are comprised of municipal officials from a defined area. Some associations, such as **San Diego Association of Governments (SANDAG)**, are voluntary associations comprised of 19 member municipalities and key stakeholder organizations from the region.

Other regional organizations are mandated by legislation or plebiscite such as **Twin City Metro Council** or **Portland's Metro Council**. These organizations usually have a quasi-judicial role in managing and reviewing regional land and transportation planning.

In Canada we have a few provincially mandated regional organizations such as **GRVD** in greater Vancouver. The recent trend to urban amalgamation in major centers may appear to reduce the need for regional collaboration in the short term, but may escalate the rural - urban tension over the long term.

We are interlinked with each other and need to plan our urban communities with this in mind.
This is not an easy process. It takes time, patience and the will to see the opportunities.

"Smart Growth" planning recognizes that if each partner, neighbour or community is strong the whole region will be stronger, conversely if neighbourhoods or communities grow at the expense of their neighbour the whole region will suffer.

Most Canadian cities don't have the motivation for cooperation that their American counterparts have – State transportation funding. However, as municipalities are facing service delivery pressures they are looking to stretch their resources. Regional service agreements have provided a workable tool that retains control within the municipality but shares resources formally in specified areas.

A barrier to voluntary cooperation between neighbours is that at some level each group competes for resources. A few cities and regions have breached this barrier.

**Think
Regionally**
(continued)

New York City has implemented a "fair share" approach to siting facilities.

Resulting from Minnesota's Fiscal Disparity Legislation, the **Twin Cities** re-distribute commercial and industrial taxes to balance fiscal disparity within their region.

This is by far the exception not the rule.

The air we breathe and the water we drink are not defined by boundaries. The impact of both rural and urban activities can impact us all.

- { When a city pollutes a river, the communities downstream also suffer the consequence.
- { When urban development is too close to live stock operations health risks can occur.
- { When one neighbour builds a large house on a small lot, their neighbours may loose sunlight.
- { When a neighbourhood that hasn't changed in 20 years now has new residents with different expectations tension between old and new can arise.

Understanding how the core, inner and outer rings of a municipal region or a neighbourhood impact each other and how each can contribute to creating a more vibrant community is an important first step.

Creating a willingness to risk change and share in the rewards becomes the urban growth management challenge.

"These projects (6 neighbouring communities in the Twin City Area) will serve as models that other metro communities can then look to for guidance in creating their own smart growth projects that will help strengthen the entire region,"

Smart Growth
Twin Cities
Council Chair
Ted Mondale

Conclusion

Having reviewed numerous communities, advocacy organizations, case studies and planning documents several themes emerged.

Cities throughout North America are realizing that being better stewards of their land and environment will cost them less and offer a better quality of life for current and future generations.

Urban change needs both leadership and a vision. For the vision to be achievable it needs to be designed to fit the City and embraced by the community.

A vision needs to be championed by influencers who have the resources to bring it to fruition.

Innovative policy frameworks and financial commitments to support urban change are key elements.

North America has a myriad of planning and legislative tools that can be used if the political and community will is there to use them and the staying power is there to hold the course.

Changing the urban landscape is a long-term project, so it is very important to communicate the milestones and reward the advocates who keep the initiatives alive.

***"What does
Smart Growth
require of
individuals? A
lot. The most
important change
in infrastructure
needed to
substitute smart
growth for
boundless sprawl
is the change to
that soft, gray
infrastructure
that lies between
our ears."***

Robert Liberty,
Executive Director,
1000 Friends of
Oregon

Growing Smart in
Minnesota
Conference,
June 1999

Appendix

City of Austin: Smart Growth Guide,
www.ci.austin.tx.us/smartgrowth/smart_q&a.htm

**References
From Web Sites**

City of Austin: Smart Growth Criteria Matrix,
www.ci.austin.tx.us/smartgrowth/smartmatrix.htm

Brisbane City Council – Our City and Suburbs,
<http://www.brisbane.qld.gov.au/ourcityandsuburbs/improvecity/index.shtml>

Cary, NC, Growth Rate Slows in Cary, as planned,
www.townofcary.org/news/news2001/growthrate.htm

Centre of Excellence for Sustainable Development, Scottsdale
Arizona CityShape 2020 Guiding Principles,
www.sustainable.doe.gov/codes/scottsdale.htm

State of Colorado, Governor Owens, Smart Growth: Colorado's
Future, www.state.co.us/issues.smartgrowth.html

The City and County of Denver, Comprehensive Plan 2000,
www.denvergov.org/CompPlan_2000/template17461.asp

Florida Sustainable Communities Center & e design,
<http://fcn.state.fl.us/fdilindex.html>

Jacksonville Community Growth Council Inc., Growth
Management Revisited, www.icci.org/studies/2001gmr.htm

Jacksonville Community Growth Council Inc., Improving
Regional Cooperation in Northeast Florida,
www.icci.org/regional.htm

Maryland: Governor's Office of Smart Growth,
www.smartgrowth.state.md.us

Manitoba Government News Release, Province approves
Funding for Urban Development Bank,
www.gov.mb.ca/chc/press/top/2001/07/2001-07-05-01.html

Virtual Ventura, Official Site of Minnesota Governor Jesse
Ventura, The Big Plan,
www.governor.state.mn.us/the_big_plan.html

National Center for Chronic Disease Prevention and Health
Promotion, ACEs (Active Community Environments),
www.cdc.gov/nccdphp/dnpalaces.htm

Government of Ontario, Ontario Smart Growth,
www.smartgrowth.gov.on.ca/english/home-e.asp

Oregon Department of Land Conservation and Development,
Land Conservation and Development Commission (LCDC) and
LCDC Advisory Committees, www.lcd.state.or.us/lcdc.html

Appendix

Oregon Transportation and Growth Management Program,
Smart Development,

www.lcd.state.or.us/tgm/smartdevelopment.htm

References**From Web Sites**

(continued)

Paying for Our Growth in Oregon, Richard Carson,
<http://planneronline.homestead.com/files/slides/slide1.htm>

Governor's Centre for Local Government Services,
Pennsylvania Growing Smarter, www.landuseinpa.com

Governor's Award for Environmental Excellence,
www.landuseinpa.com/default.asp?content=newssuccesse
[nvex](http://www.landuseinpa.com/default.asp?content=newssuccesse)

Portland, Oregon, Urban Growth Boundary, www.metro-region.org/growth/ugb/ursalugb.html

Rochester New York, Smart Growth: Envisioning the
Possibilities, <http://www.ci.rochester.ny.us/smartgrowth.htm>

Sierra Club, Community Transformations,
www.sierraclub.org/sprawl/community/transformations/index.asp

Sierra Club, Fall 2000 Sprawl Report – Smart Choice or
Sprawling Growth,
<http://www.sierraclub.org/sprawl/50statesurvey/intro.asp>

Sierra Club, Solutions That Work: Grow Smarter,
<http://www.sierraclub.org/sprawl/whitepaper.asp>

The Smart Growth Toolkit,
<http://www.smartgrowth.bc.ca/publications.html>

SMARTRAQ, Outreach Program Fact Sheet,
<http://transaq.ce.gatech.edu/smartraq>
New web site: <http://www.smartraq.net/index.htm>

Social Cost of Alternative Land Development Scenarios
(SCALDS), U.S. Department of Transportation Federal Highway
Administration, www.fhwa.dot.gov/scalds/scalds.html

The State of the Cities 1999, Third Annual Report, June 1999,
www.huduser.org/publications/polleg/tsoc99/contents.html

City of Toronto, The Official Plan for the City of Toronto,
www.city.toronto.on.ca/torontoplan/index.htm

Envision Utah, A Partnership for Quality Growth,
www.envisionutah.org

The City of Winnipeg, 2001 Home Renovation Tax Assistance
Program,
www.city.winnipeg.mb.ca/ppd/whats_new/whatsnew2.htm
www.city.winnipeg.mb.ca/ppd/programs/HRTA.htm

Appendix

Burnaby Metroland – A Summary Statement, City of Burnaby, January 1997

**References
Publications**

Calgary Growth Area Management Plan, The City of Calgary, May 2001

Cambridge Futures Inc., Cambridge Futures, 1999

Greg Cardwell, Smart Growth: Coming to a Community Near You, Delivering Creative Solutions for Complex Problems

A Civic Vignette, The Chattanooga Story – From Troubled Raw River Town to Global Model.

<http://www.academy.umd.edu/publications/Boundary/civicvignette.htm>

Common Ground, New Urban News, March/April 2000

Thomas J. DiIorenzo, The Myth of Suburban Sprawl, USA Today (Magazine), May 2000

Anthony Downs, What Does 'Smart Growth' Really Mean?, Planning Magazine, April 2001

Andrés Duany, Portland, Presented at CNU 2000: The Politics of Place, The Congress for The New Urbanism, June 16, 2000

Gordon Gibbs, A Firm Foundation, Canadian Living, November 2001

David Goldberg, Case Study: BellSouth's Atlanta Metro Plan, A Case Study in Employer-Driven "Smart Growth", Sprawl Watch

City of Guelph, Incentives for Downtown Residential Development, September 1999

Melanie Hare, Exploring Growth Management Roles in Ontario: Learning from "Who Does What" Elsewhere, September 2001

Alex Frazer-Harrison, Land grab eyed – City expansion plan, The Calgary Sun, February 14, 2001

Linda E. Hollis, Smart Growth and Regional Cooperation

Rick Holton, Competitive Livability – How Regions Prosper, Urban Land, April 2001

William H. Hudnet III, Smart Growth in a Three-Tiered City, Urban Land, August 1999

Appendix**References
Publications**
(continued)

Gerrit J. Knaap, The Urban Growth Boundary in Metropolitan Portland, Oregon: Research, Rhetoric, and Reality, www.metro-region.org/growth/ugbursalapa_article.html

Christine Kreyling, Fat City – Are we building sick communities?

Amalia Lorentz and Kirsten Shaw, Are You Ready to Bet on Smart Growth?

Michelle Mark, Village renewal debated – Council studying issue, The Calgary Sun, July 18, 2001

Kathy McCormick, Filling in the gaps: Infill houses may not appeal to everyone, but they are boosting property values of inner-city communities and some are becoming rather grand, The Calgary Herald, June 2, 2001

John G. Mitchell, The American Dream – Urban Sprawl, National Geographic Magazine, July 2001

Dowell Myers and Alicia Kituse, The Debate Over Future Density of Development: An Interpretive Review, Lincoln Institute of Land Policy, 1999

The Next Frontier – Building Homes in America's Cities, National Association of Home Builders

Ottawa 2020 Backgrounders, prepared by City of Ottawa, June 2001

R. Pecarski, Policy Report Urban Structure – A Review of Financing the Costs of Growth, City of Vancouver, December 3, 1998

Rys Phillips, A Capital in Search of a Blueprint; Building, July/August 2001

Jennifer Pitt, Carl Castillo, Sprawl in the Denver Region, Environmental Defense, 2000
Engin Isin, Ray Tomalty, Resettling Cities – Canadian Residential Intensification Initiatives, September 1993

Shelly Poticha, Smart Solutions to Sprawl, Congress for The New Urbanism, CNU 2000 Second Edition

Tarin Raad and Jeff Kenworthy, The US and Us. Alternatives Journal, Winter 1998

Smart Growth. Better Neighborhoods: Communities Leading the Way, National Neighborhood Coalition, 2000

Appendix**References
Publications**
(continued)

Robert Steuteville – Editor, New Urbanism: Comprehensive Report & Best Practices Guide, New Urban Publications Inc., 2001

Robert Steuteville, The New Urbanism: an alternative to modern, automobile-oriented planning and development, New Urban News, June 28, 2000

Diane R. Suchman and Laura Cole, Infill Housing: Cities around the United States are analyzing barriers to infill residential development as revising their policies, Urban Land, April 2001

Ray Tomalty, The Compact Metropolis: Growth Management and Intensification in Vancouver, Toronto, and Montreal, ICURR Press, February 1997

Toronto Plan, City Planning Division, Urban Development Services, Toronto, June 2001

City of Toronto Incremental Growth Study: The Avenues - Kingston Road, Concept Plan for the Study Area at Kinston Road: Guildwood GO to Highland Creek, prepared by Colliers International Realty Advisors Inc., February 2001

City of Toronto Incremental Growth Study: The Avenues - Bloor-Lansdowne, Concept Plan for the Study Area at Bloor Street and Lansdowne Avenue, prepared by Colliers International Realty Advisors Inc., October 2000

City of Toronto Incremental Growth Study: The Avenues - Finch-Weston, Concept Plan for the Study Area at Finch Avenue and Weston Road, prepared by Colliers International Realty Advisors Inc., February 2001

City of Toronto Incremental Growth Study: The Avenues - The Queensway, Concept Plan for the Study Area at The Queensway: Mimico Creek to Kipling Avenue, prepared by Colliers International Realty Advisors Inc., February 2001

Jerry Weitz and Terry Moore, Development inside Urban Growth Boundaries - Oregon's Empirical Evidence of Contiguous Urban Form, APA Journal, Autumn 1998

Robin White, Designing more Sustainable Suburban Communities, Plan Canada, July 1996

Appendix**Web Sites
General
Information
Sources**

1000 Friends of Wisconsin and the Land Use Institute,
www.1000friendsofwisconsin.com/smartgrowth/

American Planning Association, www.planning.org

City of Austin, www.ci.austin.tx.us/smartgrowth/

Brisbane City Council – Urban Renewal – What Council is
Doing,
[http://www.brisbane.qld.gov.au/council_at_work/improving
city/urban_renewal/what_council/index.shtml](http://www.brisbane.qld.gov.au/council_at_work/improving_city/urban_renewal/what_council/index.shtml)

Center for Disease Control and Prevention, www.cdc.gov/

Centre of Excellence for Sustainable Development,
www.sustainable.doe.gov/landuse
www.sustainable.doe.gov/landuse/ellusstoc.shtml

Center for neighborhood Technology, www.cnt.org

Charlotte-Meckleburg, North Carolina, www.charmeck.nc.us/

Community Preservation Institute,
www.state.ma.us/env/ir/cpil/cpinsthme.htm

Congress for the New Urbanism, www.cnu.org

Cyberbia, The urban planning portal, www.cyberbia.org

The Conservation Fund, www.conservationfund.org

Governor Owens Smart Growth Initiative,
www.state.co.us/smartgrowth/index.html

Greater Vancouver Regional District, www.qvrd.bc.ca
Healthy Communities, www.healthycommunities.org

Growth Management Task Force, web.co.wake.nc.us/gmtf/

Hudson Valley Greenway,
www.hudsongreenway.state.ny.us/

City of Houston, www.ci.houston.tx.us/planning.htm

International City/County Management Association,
www.icma.org

International Institute for Sustainable Development,
<http://liisd1.iisd.ca/measrel/compendium.asp>

Local Government Commission, <http://www.lgc.org/>

Growth in Maryland,
www.op.state.md.us/smartgrowth/index.html

Appendix**Web Sites
General
Information
Sources
(continued)**

State of Massachusetts Community Preservation Program
www.state.ma.us/envir/cpal/communitypreservation.htm

Metro Council (Twin Cities, MN),
www.metrocouncil.org/mnsmartgrowth/index2.htm

Mnsmartgrowth, www.metrocouncil.org/mnsmartgrowth

NACo/USCM Joint Center for Sustainable Communities,
www.usmayors.org/sustainable

National Association of Counties (NACo), www.naco.org

National Association of Local Government Environmental
Coalition, www.nalgep.org

National Neighborhood Coalition,
www.neighborhoodcoalition.org

National Trust for Historic Preservation, www.nationaltrust.org

National Geographic.com, Virtual World – The New Suburb?,
www.nationalgeographic.com/earthpulse/sprawl/index_flash.html

New Urban News, www.newurbannews.com/

Northeast-Midwest Institute, www.nemw.org

Ottawa 2020, Smart Growth Summit,
www.ottawa2020.com/en/forum/index.cfm

Principles of Smart Growth for Minnesota,
www.1000fom.org/principlesofsg.htm

San Diego Association of Governments (SANDAG),
www.sandag.coq.ca.us

San Francisco Greenbelt Alliance
www.greenbelt.org/

The Seattle Spirit, www.coopnw.org/content.asp,
www.coopnw.org/seattle_spirit.htm

Shell Canada – School Ground Naturalization Projects,
http://205.233.108.142/code/values/environment/sef_schools.html

Sierra Club, www.sierraclub.org/index2.html

Smart Growth Network, www.smartgrowth.org/index2.html

SMARTRAQ, www.smartraq.net

AppendixSustainable Communities Network, www.sustainable.org**Web Sites**Sustainable Seattle, www.sustainableseattle.org**General****Information**TRIP: The Road Information Program, www.tripnet.org**Sources**

(continued)

Vermont Forum on Sprawl's Mission,
<http://www.vtsprawl.org/SolutionsMatrix/Federal.htm>

Wake County, Growth Management Task Force,

<http://web.co.wake.nc.us/gmtf/>Urbanfutures.org: A project of the Reason Public Policy
Institute, www.urbanfutures.orgUrban Land Institute, www.uli.org

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Edmonton's Urban Land Intensification Strategy

Audit Report Six: Intensification Opportunities and Deterrents



January 18, 2002

THE CITY OF
Edmonton

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Introduction

Are there opportunities to intensify in Edmonton?

If intensification occurs, Edmonton's citizens may have more choices. Choices in the types and locations of housing available to them; in the distances they go to destinations; and in the transportation choices they make. Intensification may also achieve municipal efficiencies by maximizing the use of land in Edmonton and by maximizing the use of Edmonton's existing physical and human infrastructure. Maximizing use is anticipated to reduce corporate costs and thereby reduce costs for citizens.

Increasing the mix of structures or activities on the land is one vehicle for maximizing the use of land and possibly increasing citizen choices. Most of the opportunities identified in this report are based on that premise.

Purpose

This report was written to provoke discussion on opportunities for intensification in Edmonton. The report provides a menu of opportunities that may be feasible for Edmonton. The opportunity suggestions have been culled from literature review, Internet research, comments from focus group sessions, and interdepartmental research.

Report Organization

If the opportunities are supported by *Plan Edmonton's* current strategies, and are subsequently supported by decision-makers and the community, implementation will be more feasible. If the opportunities are not within the *Plan Edmonton* policy framework, amendments to *Plan Edmonton* may be required, prior to pursuing implementation. The report has been organized to reflect the groupings within *Plan Edmonton*.

The opportunities are also grouped by the outcomes they support or the tools that may promote intensification.

Positive growth outcomes include:

- ◆ Building on Investment
- ◆ Enhancing Access
- ◆ Providing Choice
- ◆ Promoting Economic Activity

Intensification can also be supported through the use of tools, such as:

- Policy and Regulations
- Financial Instruments

General Deterrents to Intensification

When considering opportunities for Edmonton, deterrents should also be identified. Although any opportunity may have deterrents specific to it, to avoid repetition, common deterrents have been grouped together and listed here. This list of deterrents came from comments made at the focus group sessions (Audit Report Three: Urban Land Intensification Strategy Focus Groups Summary Report) and represent perceptions and concerns. While these deterrents are possible, they are not assured and different approaches to intensification may limit the magnitude of the deterrent.

In the Community

- Community resistance
- Lack of certainty or trust in planning process
- Frequent adversarial planning process
- Possible displacement of residents, businesses
- Loss of character and stability in established neighbourhoods

In Society

- Reduced privacy
- Anticipated overcrowding of schools, parks and other facilities
- Increased parking needs
- Smaller, fewer yards, parks and recreation areas

In Corporate Structure

- Reluctance to divert or limit growth
- Anticipated burden on hard/soft infrastructure/services/utilities
- Aging infrastructure throughout the City
- More money required for transit
- Tax money is not earmarked for intensification problems or solutions
- Transportation infrastructure maxed out in certain places

In the Market

- Regional interdependence, growth could go to other municipalities
- Brownfield costs
- Unfavorable development economics

Planned Growth - Building on Investment

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Work with communities that will be receiving infrastructure and planning investments in the form of Area Redevelopment Plans (ARP) and the Neighbourhood Improvement Program (NIP) to identify community driven intensification opportunities (see Maps 2 and 3).	- Community resistance - NIP was rehabilitation, intended to replace failing infrastructure, additional capacity may not have been included. Some roadway capacities have been reduced.	Yes 1.1.17	Yes
Implement the Downtown Plan: - Fill gaps in Downtown's retail market - Cap taxes (for a limited time) on downtown buildings that undergo reinvestment of a certain magnitude - Maintain the City Centre Farmer's Market - Develop a creative shopping/public place like Granville Island - Encourage the development of downtown's parking lots - Provide more amenities in the Downtown	- Edmonton's retail market is already saturated - Winter weather limits opportunities for plazas - Owner reluctance - Contradictory to Com. Services mandate	Yes 1.2.1 1.2.2	Yes
Direct intensification to vacant, serviced lands, or to lands containing vacant or derelict buildings.	- Owner reluctance - May be unfavorable development economics	Yes 1.5.2 1.3.5	No

Planned Growth - Building on Investment

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Intensify in areas with existing strengths, such as City facilities, commercial and employment facilities, parks, schools, and access to LRT stations or high frequency bus lines (<i>see Map 1</i>).	- Existing services are usually adjacent to mature neighbourhoods - Large-scale intensification opportunities may be limited. - Community may oppose small-scale intensification opportunities. - Disruption to neighbourhood, time involved to intensify.	Yes 1.3.4 1.3.5 1.3.6 1.5.2	No
Encourage intensification on institutional lands available for redevelopment (<i>see Map 5</i>).	- Community resistance - May be unfavorable development economics	Yes 1.3.5 1.5.2	No
Work with communities that have received infrastructure and planning investments in the form of Area Redevelopment Plans (ARP) and the Neighbourhood Improvement Program (NIP) to identify community driven intensification opportunities (<i>see Maps 2 and 3</i>).	- Community resistance - NIP was rehabilitation, intended to replace failing infrastructure, additional capacity may not have been included. Some roadway capacities have been reduced. - ARP's dealt with future intensification options.	No	No
Work with business and communities that are receiving infrastructure and planning investments in the form of Business Revitalization Zones (BRZ) to identify community driven intensification opportunities (<i>see Map 4</i>).		No	No

Planned Growth - *Building on Investment*

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Require all existing neighbourhoods to be at a threshold development level before approving additional neighbourhoods	◆ Limits growth ◆ Reduces consumer choice between neighbourhoods ◆ May divert growth to other municipalities ◆ May require Edmonton to pick its housing niche	No	No
Direct intensification efforts to complement infrastructure and public facility planning.		No	No
Prevent re-use of industrial lands adjacent to LRT stations, focus on encouraging higher density residential or high employment uses	◆ May be brownfield clean up costs	No	No

Planned Growth – Enhancing Access

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Improve connectivity between Downtown, river valley, services and suburbs by: linking parks and open spaces	♦ Funding	Yes 1.6.1	Yes
Direct intensification to lands along high frequency bus routes, lands surrounding established transit centres or lands surrounding LRT stations. (see Map 1).		Yes 1.3.4	No
Develop transit oriented, compact neighbourhoods in locations that are served by rapid transit.	♦ Funding ♦ Developer/market resistance	No	No
In new areas focus intensification around transit centres and schools.	♦ Cost of providing transit to early stage development ♦ Developer and market acceptance	No	No
Increase neighbourhood connectivity using grid iron, modified grid iron, radial or connective curvilinear street patterns.	♦ Neighbourhood design is determined by developer ♦ Most traffic calming is required on grid streets. ♦ Gridiron street system has greatest amount of site imperviousness compared to other road patterns.	No	No

Planned Growth – Providing Choices

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Preserve natural spaces for the future.	♦ Costs of setting aside natural areas can be high	Yes 1.6.2 4.4.7	Yes
Provide opportunities for people to age in place, or at least in their neighbourhoods by encouraging the provision of life cycle housing and mixed tenure opportunities	♦ Developer resistance in new areas ♦ Community resistance in established areas	Yes 1.1.1 1.5.2 1.7.3	No
Follow Vancouver's example and allow "work/live" zoning for greater opportunities for working where you live.	♦ Community resistance to exceeding current home based business restrictions	Yes 1.1.1 1.1.8	No
Allow for greater opportunities for individual (owner occupied) intensification by permitting basement suites (like Vancouver), garage suites and granny flats in all low-rise residential zones without drastic change to the physical appearance of a neighbourhood.	♦ May affect characteristics of neighbourhoods ♦ Community resistance ♦ Building codes may not permit this option ♦ Harder to provide necessary services to all areas of the City ♦ Parking problems	No	No
Follow the New Urbanism example and require individual streets to have a minimum mix of housing types in new or redeveloping neighbourhoods with finer grained transitions.	♦ Micro-design regulations at this level may be viewed as excessive by developers and the City	No	No
Follow Winnipeg's example and encourage homeowner upgrading by providing incentives to owner occupied homes assessed at less than a certain value	♦ Cost	No	No

Planned Growth – *Providing Choices*

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Following Ireland's example, provide limited tax holidays for new (rental) apartment development.	◆ Subsidizing rental house construction is expensive for a municipality ◆ The federal government does not subsidize rental construction anymore	No	No
Provide physical and human infrastructure in conjunction with development in partially built neighbourhoods to increase competitiveness with municipalities outside of Edmonton	◆ Providing levels of service that anticipate population growth is expensive and may encourage sprawl.	No	No

Planned Growth – Promoting Economic Activity

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Encourage intensification on industrial lands that have potential for building more structures or providing for more activities, these include the City Centre Airport, the old Burns plant, areas near Fort Road, industrial parts of Calgary Trail and large areas in SE and NW Edmonton.	♦ Brownfield costs ♦ Servicing costs	Yes 1.1.12 1.3.5	Yes
Promote commercial intensification on commercial sites that have certain characteristics, such as old structures, a certain number of vacant structures and a low tax return. (see map 5)		Yes 1.5.4	No
Intensify uses around nodes or pods, such as <i>Plan Edmonton's</i> Economic Activity Centres, or the nodes identified in newly planned areas (see Map 6).		Yes 1.4.2 1.4.3	No
Encourage shopping centres and business parks to become all-purpose activity centres		Yes 1.5.4	No
Follow Toronto and Vancouver's example and allow two to three stories of housing above all commercial units	♦ Building code ♦ Where current zoning permits this, no development has occurred ♦ Exceeds <i>Plan Edmonton</i> policy by permitting additions on all commercial buildings	No	No

Planned Growth – Policy & Regulation

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Provide for more compact lots in new areas.	◆ Smaller lots inhibit future re-development options for both owners and the City ◆ Must be planned comprehensively to ensure areas with small lots don't create problems with parking and future dis-investment.	Yes 1.7.2 1.7.3	Yes
Promote intensification through consumer information and a ten year intensification demonstration project, sponsoring one project per year	◆ Would require a new City program	Yes 1.3.5 1.5.2	No
Establish an urban design panel (with representation from affected communities) to review major developments and intensification projects	◆ An urban design panel has been established for the downtown.	Yes 1.1.17	No
Develop a Vision for Urban Growth. This could articulate <i>Plan Edmonton's</i> vision or become a visioning/modeling exercise for Edmonton.	◆ Will require revision to Intensification Strategy Terms of Reference/direction from City Council	No	No
Establish an Urban Growth Boundary	◆ <i>Plan Edmonton's</i> Map 1, Land Development Concept, identifies the limits for Edmonton's urban growth ◆ A larger growth boundary would require inter-municipal cooperation	No	No

Planned Growth – Policy & Regulation

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Consult with the greater community to identify neighbourhoods with needs that could be met through intensification. Consult with individual communities to determine which communities wish to pursue intensification, and ensure that needs arising from intensification (infrastructure, human services, parks, etc.) are met.	♦ Will require some changes to corporate culture ♦ Somewhat similar to ARP and unfunded NIP programs.	No	No
Ensure future and existing residents of partially built and new neighbourhoods are given information on reasonable expectations for the provision of services.		No	No
Raise the minimum density requirements and regulate them		No	No
Re-examine the design of new suburbs with a view to allowing future intensification re-development options	♦ Generally, residential neighbourhoods last many years before redevelopment happens	No	No
Develop more stringent requirements for underground parking	♦ Cost to developers (\$15,000 to \$20,000 a stall) ♦ Cost passed on to tenants who may choose to park a second vehicle on the street to avoid monthly parking cost ♦ Current Zoning Bylaw hinders, other than in RA7 zone, there is no extra Floor Area Ratio (FAR) for providing underground parking.	No	No

Planned Growth – Policy & Regulation

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Revise urban design principles, standards and guidelines to enhance and facilitate intensification	♦ Urban design guidelines have been developed for the downtown and through policies in several ARPs ♦ Intensification may be a result of urban design but is not currently the objective	No	No
Encourage an increase to 60% single family units and 40% multi family units in new and redeveloping neighbourhoods.	♦ Current standard is 65% single family units and 35% multi family units ♦ Community resistance ♦ Impact on character of neighbourhood	No	No

Planned Growth – Financial Instruments

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Provide incentives for development in neighbourhoods that wish to intensify.	◆ Downtown initiatives have been effective but are restricted to the downtown. ◆ Incentives across a wider area would be expensive.	Yes <i>1.3.5</i> <i>1.5.2</i>	Yes
Respond to opportunities to provide capital funds for new or improved City facilities in established or intensified areas.	◆ Difficult to fund projects that do not fall under the Capital Priorities Plan.	Yes <i>1.5.2</i> <i>1.5.2</i> <i>1.5.3</i>	No
Use tax increment funding to encourage intensification.	◆ Has been under investigation for many years ◆ This is popular in the U.S.A. due to the tax treatment of income from municipal bonds. The same rules do not apply in Canada.	Yes <i>1.3.5</i> <i>1.5.2</i>	No
Follow the Austin example and create an intensification score card...options scoring above a certain threshold receive a grant...or other incentive.	◆ Cost to municipality (equity and administration)	No	No
Partner with government or banks to provide Location Efficient Mortgages – rewarding homebuyers for choosing neighbourhoods served by transit and close to place of work. LEM lets homebuyers apply money normally allocated for a second car (approx. \$6,200) to larger mortgages.	◆ Current low mortgage rates and bank offers may not make a LEM more attractive to homebuyers. ◆ Major incursion into the housing market for a municipal government	No	No

Infrastructure Development and Maintenance –*Building on Investment*

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Develop a long-term infrastructure strategy.		Yes 4.1.3	Yes
Improve connectivity between Downtown, river valley, services and suburbs by providing more bikeway, walkway and transit options.	♦ Funding	Yes 1.6.1 4.3.1	Yes
Support investment by developing an infrastructure lifecycle maintenance funding program and allocating annual funding to it.	♦ Time required, this has been in the works for four years.	Yes 4.1.3	No
Identify areas that require investment to facilitate intensification.	♦ Neighbourhood Improvement Program (NIP) program did this to some degree for hard infrastructure, but NIP program not funded ♦ Occurs to some extent through the Capital Priorities Plan process but not fully coordinated.	Yes 4.1.8	No
Develop complementary infrastructure and facility plans.		No	No
Free up lands near LRT stations for intensification by moving City yards away or buffering them to make surrounding land more attractive for intensification.	♦ Cost of implementation and replacement lands. ♦ May be brownfield clean up costs	No	No
Provide better transit service and improved rolling stock in higher density areas, or areas targeted for higher density and eliminate or reduce service in low density or low ridership areas.	♦ Funding constraints ♦ May be counter productive to transit to further reduce or eliminate service in certain areas.	No	No

Infrastructure Development and Maintenance - *Financial Instruments*

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Prior to approving new plan areas, weigh the capital and operating costs the municipality will pay for the new plan area.	◆ Information requirements for plans are not detailed enough to provide accurate estimates ◆ Limited staff resources to perform the additional work to analyze cost and recovery rates ◆ Plans are amended over time, so calculations will change	Yes <i>1.1.13</i> <i>4.2.4</i>	No
Require full cost pricing for all developments	◆ Some developments are undertaken for public service goals and costs cannot be fully recovered, ie. a police station ◆ Cost may be prohibitive for consumers	Yes <i>1.1.13</i> <i>4.2.4</i>	No
Raise the priority of the Neighbourhood Improvement Program (NIP) in the Capital Priorities Plan	◆ Supportive funding from the Provincial and Federal governments has dried up	Yes <i>4.1.8</i>	No
Allocate monies gained from intensification (utility fees, charges) to improving infrastructure, parks and human services in the same area.	◆ Direct allocation is a problematic precedent for municipal government	No	No
Re-assess the cost of providing services in an area (including infrastructure maintenance costs) and align the cost of service provision with tax assessments	◆ The Municipal Government Act dictates the use of market value assessment.	No	No
Require additional development cost charges for extension of services such as libraries, fire stations, etc.	◆ Inequitable to homes and businesses on the outskirts, as established neighbourhoods would not be impacted. ◆ New funding requirement may be perceived as inequitable to developers. ◆ New development may go to other municipalities.	No	No

Infrastructure Development and Maintenance - *Providing Choices*

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Provide the infrastructure to attract/support tele-working.		Yes 4.6.5	Yes

Infrastructure Development and Maintenance - *Promoting Economic Activity*

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Create a Land Drainage Utility and Storm Servicing Strategy to aid industrial development in Edmonton's industrial areas.	♦ The major obstacle to utility status for stormwater drainage is establishing the method for calculating user fees.	No	Yes

Services to People - *Building on Investment*

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Develop a long-term public facility (recreation, library, and culture) plan.		Yes 3.4.6	No
Develop complementary infrastructure and facility plans.		No	No

Leadership and Regional Cooperation - *Building on Investment*

Opportunity	Deterrent	Plan Edmonton Direction	Active Program
Acknowledge regional interdependence with regard to intensification and encourage a regional approach to intensification.	♦ There is no regional mandate.	Yes 1.1.9 1.1.10 1.1.11	No

Conclusion

Implementing any of the opportunities identified in this report will require community and political will. Those opportunities that fall under the umbrella of *Plan Edmonton* will have greater ease of implementation, while those opportunities that do not have *Plan Edmonton* direction will require strategic direction. Discussion and refinement of the suggested opportunities is essential before proceeding further.

List of Maps

Map – 1

Transit Investment

Map – 2

Neighbourhood Improvement Program Areas

Map – 3

Area Redevelopment Plans

Map – 4

Business Revitalization Zones



Map – 5

Intensification Opportunities

Map – 6

Potential Intensification Nodes

